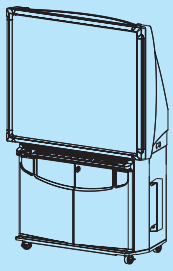
# Installation Guide

## *Rear Projection* SMART Board™ 3000i

Interactive Whiteboard



SMART Technologies Inc.

## *Registration Benefits*

In the past, we've made new features such as handwriting recognition and SMART Recorder available as free software upgrades. Register your *Rear Projection* SMART Board 3000i interactive whiteboard to be notified of free upgrades like these.

Keep the following information available in case you need to contact Technical Support:

**Serial Number** _____

**Date of Purchase** _____

Register online at: www.smarttech.com/registration

**FCC Warning**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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U.S. Patent Nos. 5,448,263; 6,141,000; 6,326,954; 6,337,681; 6,741,267; 6,747,636 and 6,803,906.

Canadian Patent No. 2,058,219. Other U.S., Canadian and foreign patents pending.

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# Important Information

Please read this manual carefully before setting up and using the *Rear Projection* SMART Board™ 3000i interactive whiteboard. With proper care, your 3000i will provide years of trouble-free service.

**WARNING**

The projector inside the unit is a high brightness light source. Do not look directly into the beam of light. Prevent children from staring directly into the beam of light.

Le projecteur qui se trouve à l'intérieur de l'armoire est une source de lumière à luminosité élevée. Ne fixez pas et ne regardez pas dans la direction du faisceau lumineux. Empêchez les enfants de regarder dans la direction du faisceau lumineux.

El proyector que se encuentra en el interior de la cabina es una fuente de luz de alta luminosidad. No mire fija ni directamente al haz de luz. Evite que los niños fijen la vista en el haz de luz.

Der Projektor im Schrank stellt eine Lichtquelle mit hoher Intensität dar. Blicken Sie nicht direkt in den Lichtstrahl. Verhindern Sie, dass Kinder direkt in den Lichtstrahl blicken.

キャビネット内のプロジェクターは、高輝度光源です。ビーム光線を覗き込んだり、直接見たりしないでください。お子様がビーム光源を覗き込まないように注意してください。

**WARNING**

Make sure an AC outlet is near the 3000i and remains easily accessible during use.

Assurez-vous qu'une prise secteur se trouve à proximité du 3000i et demeure facilement accessible durant l'utilisation.

Asegúrese de que hay una toma de corriente alterna cerca del 3000i y que es fácilmente accesible para su uso.

Stellen Sie sicher, dass sich in der Nähe des 3000i eine Steckdose befindet und sie während der Verwendung auch leicht zugänglich bleibt.

3000i
の近くに電源用のコンセントがあり、使用中に手が簡単に届くことを確認してください。

**WARNING**

To reduce the risk of fire or electric shock, do not expose this product to rain or moisture.

Pour réduire le risque d'incendie ou de choc électrique, évitez d'exposer ce produit à la pluie ou à l'humidité.

Para reducir el riesgo de incendio o de descarga, no exponga este producto a la lluvia o la humedad.

Um das Risiko eines Feuers oder eines Stromschlags zu reduzieren, darf das Produkt weder Regen noch Nässe ausgesetzt werden.

火事や感電の恐れがありますので、この製品は雨にさらしたり湿気のあるところに置かないでください。

**WARNING for European Customers**

The 3000i should be used only with European TN and TT power distribution systems.

The 3000i is not suitable for older, IT-type power distribution systems found in some European countries. “This system (IT-type) is widely used isolated from earth, in some installations in France, with impedance to earth, at 230/400V, and in Norway, with voltage limiter, neutral not distributed, at 230V line-to-line.” (IEC 60950:1999)

Contact qualified personnel if you’re uncertain of the type of power system available where you’re installing your 3000i.

**AVERTISSEMENT pour les clients européens**

Le 3000i doit être utilisé uniquement avec les systèmes de distribution d’alimentation européens TN et TT.

Le 3000i ne convient pas aux systèmes de distribution d’alimentation plus anciens de type IP utilisés dans certains pays européens. “Ce système (type IT) est largement utilisé isolé de la terre, dans certaines installations en France, avec une impédance à la terre, à 230/400V, et en Norvège, avec limiteur de tension, neutre non distribué, à 230V ligne à ligne.”(IEC 60950:1999)

Si vous avez des doutes sur le type de système d’alimentation disponible lors de l’installation de votre 3000i, contactez un personnel qualifié.

**ADVERTENCIAS Para los clientes europeos**

La 3000i sólo se podrá utilizar con los sistemas eléctricos TN y TT europeos.

Este modelo no está disponible para antiguos sistemas eléctricos de tipo IT que aún se utilizan en algunos países europeos. “Este sistema (IT) tiene una utilización muy extendida como núcleo aislado de tierra; en algunas instalaciones en Francia, con impedancia de tierra, a 230/400 V; y en Noruega, con limitador de tensión, a 230 V entre conductores.” (CEI 60950:1999)

Si no está seguro del tipo de sistema eléctrico que posee, póngase en contacto con personal cualificado a la hora de instalar su modelo 3000i.

**WARNUNG für europäische Kunden**

Das 3000i darf nur mit europäischen TN- und TT-Netzverteilern verwendet werden.

Das 3000i eignet sich nicht für ältere Netzverteiler vom Typ IT, die in manchen europäischen Ländern zu finden sind. “Dieses System (IT-Typ) wird, von der Erdung isoliert, in einigen Installationen in Frankreich mit Impedanz zu Erde bei 230/400 V und in Norwegen mit Spannungsbegrenzer, neutral, nicht verteilt, bei 230 V Leitung zu Leitung verwendet.” (IEC 60950:1999)

Wenden Sie sich an qualifiziertes Personal, wenn Sie sich nicht sicher sind, welches Stromsystem dort zur Verfügung steht, wo Sie Ihr 3000i installieren.

ヨーロッパのお客様への警告

3000i はヨーロッパの TN および TT
配電システムでのみ、使用する必要があります。

3000i はヨーロッパの一部の国で使用されている旧式の IT
タイプの配電システムには適していません。「このシステム (IT タイプ)
は、地面から離した状態で広く使用されていますが、一部フランスでは
230/400V
でインピーダンスを通して接地され、ノルウェイでは、電圧制限器により中性
非分散型で 230V のライン間電圧で使用されています」(IEC 60950:1999)

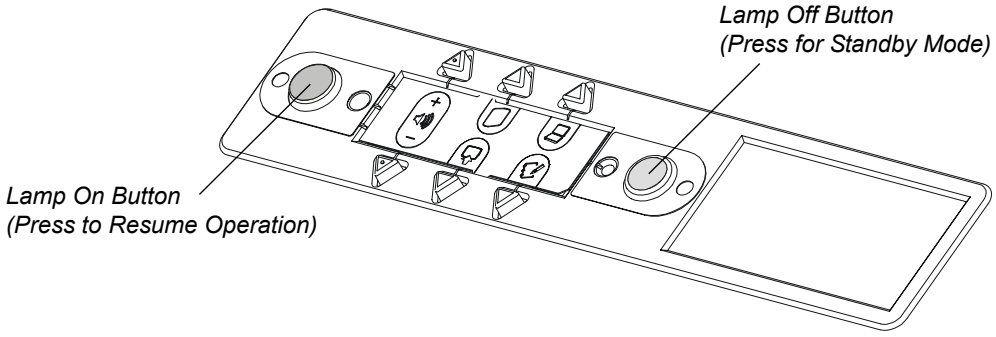
3000i
をインストールする際に使用可能な電源システムのタイプに関して不明な点
がある場合は、担当者までお問い合わせください。

**CAUTION**

The projector inside the 3000i has been designed for use under normal operating conditions only. Normal operating conditions are defined as product use that does not exceed 8 hours per day and 260 days per year. Exceeding these operating conditions could cause projector damage. Damage caused by such extended use will not be covered by the product warranty.

To maintain normal operating conditions, make sure the projector is in standby mode outside of normal, daily (8 hour) operation. In standby mode, the lamp is turned off, while the projector remains on. Be sure to press the **Lamp Off** button in the Control Panel at the end of the day, and your projector will remain in standby mode until you press the **Lamp On** button the next day.

**NOTE:** You can also configure the computer's power management settings so that after a period of idle time it stops sending out a video signal, turning off the projector lamp (page 24).




## Other Precautions

For operating safety and to avoid damage to the cabinet and its parts, please read the following information carefully.

- Move the unit with care. Quick stops, excessive force, and movement over uneven surfaces can overturn the unit.
- When you transport the 3000i, *only* ship it in an upright position and never lay the interactive whiteboard face down. In addition, ensure that the projector is secure, or remove and repackage it in the original projector's packaging.

- If you transport the 3000i over a distance, we strongly urge you to completely repackage it using the original packaging. This packaging was designed with optimal shock and vibration protection. If the original packaging is no longer available, pack all components with as much padding as reasonably possible to ensure that they are not exposed to excessive vibration or shock.
- Clean the interactive whiteboard surface regularly so dust doesn't build up on the surface and adversely affect the operation of the 3000i.
- *Do not* touch the rear surface of the screen or apply isopropyl alcohol, water or acetone. If any of these fluids come into contact with this surface, the diffusion coating will be damaged, resulting in a permanent deterioration in display quality.
- If you inadvertently smudge the rear surface of the screen, dab it carefully with a soft cloth and alcohol-free glass cleaner. Do not spray glass cleaner directly on the back of the screen; spray it lightly on the cloth and then gently dab the rear surface until the marks are removed.
- The 3000i uses digital cameras located inside the screen frame. Do not allow excess glass cleaner to flow into the crack between the frame and the writing surface because the cleaner could damage these cameras.
- Avoid setting up and using the 3000i in an area with excessive levels of dust, humidity or smoke.
- Lock the casters after you set up the cabinet so it remains stationary while in use.
- Avoid exposing the 3000i to extreme heat or cold. The operating temperature range is from 41°F to 85°F (5°C to 29°C) with up to 80% humidity (non-condensing). The shipping and storage range is from -4°F to 95°F (-20°C to 35°C) with up to 80% humidity (non-condensing).
- If possible, unplug the unit before thunderstorms. However, do not touch the unit or the unit's power plug during a thunderstorm as there is a risk of electrical shock.
- Unplug the unit if you won't use it for an extended period.
- Use safe practices when you're plugging in the power cable. For example, make sure your hands are dry and don't insert the plug into a dusty outlet. Unplug the cabinet before you install or service any components.
- This product has a three-wire grounding-type plug, which will only fit into an AC grounding-type power outlet. Make sure an AC outlet is near the 3000i and remains easily accessible during use. If the outlet can't accommodate the plug, have your electrician replace the obsolete outlet. Do not circumvent the safety features of the grounding-type plug. Do not modify the power cord.
- Handle the power cord carefully and avoid excessive bending. Route the power cord so it's unlikely to be walked on or pinched by items placed upon or against it. If you must run a cable over the floor, lay it in a flat, straight line and secure it to the floor with tape or a cable management strip of contrasting color.
- If you require replacement parts, ensure the service technician uses the replacement parts specified by SMART Technologies Inc. or parts with the same characteristics as the original.

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# About the 3000i

The 3000i is a slim *Rear Projection* SMART Board interactive whiteboard cabinet with an integrated LCD projector and a 66" (167.6 cm) diagonal interactive SMART Super Screen. The Super Screen is an interactive whiteboard designed for enhanced rear-projection clarity.

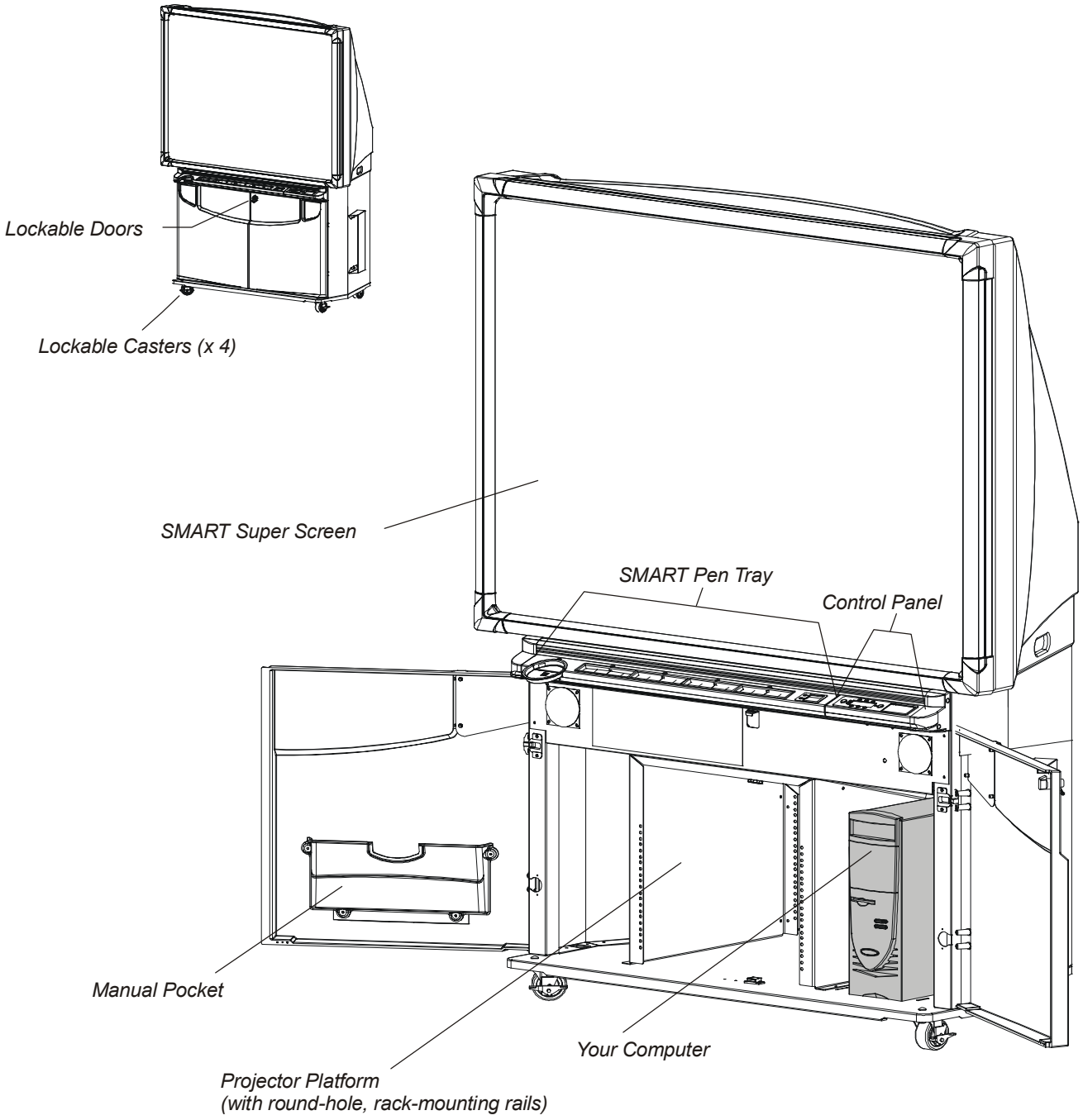
The interactive whiteboard includes DViT™ (Digital Vision Touch) technology, which uses digital cameras to track objects that interact with the interactive whiteboard. Each camera is calibrated to recognize the position of a pen tray tool or your finger on the whiteboard surface and to translate that position to a computer point.

To enable rear-projection capability, a mirror system in the cabinet redirects the projected image from your computer, VCR, DVD player or guest laptop onto the back of the interactive whiteboard screen. Without the distracting shadows of a front-projection system, you can then perform any normal computer operation, such as opening or closing an application, scrolling through a file or opening your browser, just by touching the screen surface.

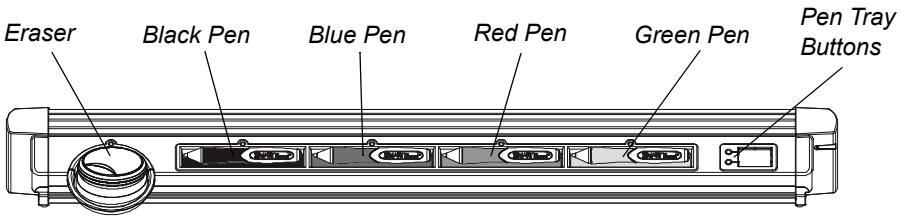
## 3000i Features

- A touch-sensitive interactive whiteboard that enables you to do everything you can do at a computer workstation—open files, conference with others, create new or edit existing documents, visit Internet sites, play video clips, and so on—simply by touching the interactive whiteboard. You can also write over any live application in digital ink using a pen tray pen or your finger, and then save your notes to a SMART Notebook™ file for future reference and distribution.
- An integrated XGA projection system
- An audio system, a SMART pen tray (including four pens and an eraser) and a wireless keyboard
- A Control Panel with easily accessible projector and volume controls
- A Connection Panel at the rear of the cabinet that you can use easily to connect a network cable, printer, second projector and room audio system
- Locking front doors for enhanced security
- Minimal floor space requirements. Fits easily through any standard doorway for true room-to-room mobility.

## Getting to Know Your 3000i



## Pen Tray Features




### Using a Pen Tray Pen

To write on top of the computer image with digital ink, just pick up a pen from the pen tray and write on the interactive whiteboard.

You can use SMART Board software to change any of these pens to highlighters, change their colors or alter their width. You can also change the size of the area erased by the pen tray eraser.

To reconfigure the pens or eraser, press the **SMART Board** icon in the system tray (Windows computers) or in the Dock (Macintosh computers), select **Control Panel**, and press on **Pen Tray Settings**.

**NOTE:** The pens provided with your 3000i have black tips because the digital cameras in the bezel can more readily detect dark objects. If you need to use a different object to point at the screen, choose one that has a dark tip but which won't mark or damage the interactive screen.

### Using the Pen Tray Buttons

Press the top pen tray button to make the SMART Keyboard appear for on-screen typing and handwriting recognition. Press the bottom button to make the next contact with the interactive whiteboard a right-mouse click.

You can reconfigure these default behaviors so that either button can initiate any of the following events:

- Print the current page
- Move to the preceding or the following Notebook file page
- Clear all notes from the current page
- Produce a floating mouse

To reconfigure the pen tray buttons, press the **SMART Board** icon in the system tray (Windows computers) or in the Dock (Macintosh computers), select **Control Panel**, and press on **Pen Tray Settings**.

## The NEC VT670 Projector

**CAUTION**

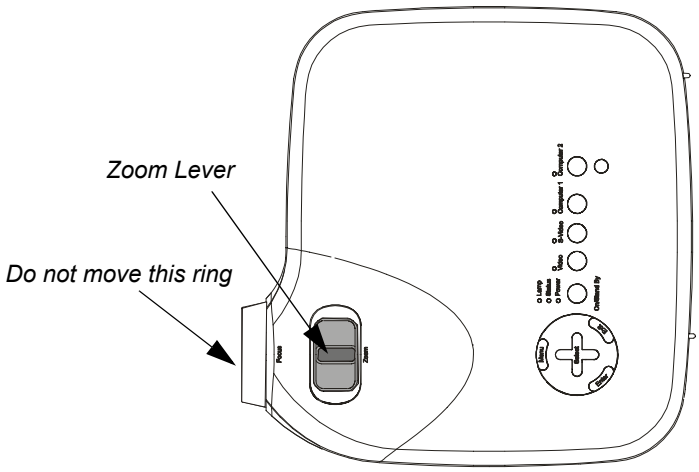
Do not move the white ring that surrounds the short-throw, customized projector lenses, even though the *NEC VT470/570/670 User's Manual* states that you should use this ring to obtain the best focus. You must disregard this information.

Instead, use the Zoom lever on the projector, which has been modified to adjust the image focus. Again, contrary to the *NEC VT470/570/670 User's Manual*, the Zoom lever will not adjust the image size on the screen.

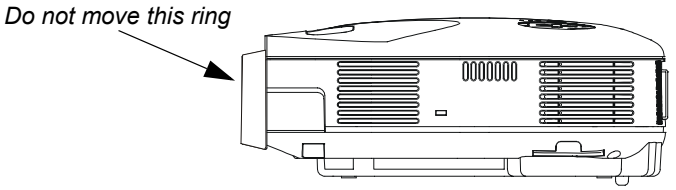
The NEC projector featured in the 3000i rear projection cabinet is an NEC VT670. The VT670 projector has XGA resolution (1024 × 768).

The NEC VT670 projector is secured on the projector platform. The projector is adapted for use in the 3000i and, consequently, its behavior differs in two significant ways from the description in the *NEC VT470/570/670 User's Manual*:

- The Zoom lever does not change the size of the projected image. Instead, it adjusts image focus.
- The white ring no longer adjusts focus and you should not move it under any circumstances.




***Bottom View***




***Side View***

**NOTE:** For more information on adjusting the projected image, turn to page 21.

## To set or restore the optimal settings for the NEC VT670 projector

We've configured your projector settings for optimal performance with the 3000i. However, if these settings are accidentally altered, follow the procedure below to restore them.

1. Press the **Menu** button on the projector remote control or the **Menu** button on the projector.
2. Select **Setup > Orientation > Ceiling Rear Projection** to orient the projected image for rear projection.
3. Select **Image > Auto Keystone > Off** to ensure optimal image quality.
4. Select **Advanced > Fan Mode > Auto**. Although this is a default setting, it's important enough to warrant special mention.
5. Select **Advanced > Page2 > Auto Adjust > Normal** to automatically determine the best resolution for the current RGB input signal and to compensate for resolution differences among various input devices (such as guest laptops).
6. Press **OK**.

   **NOTE:** All other settings are the NEC factory default settings. See pages 40–50 of the *NEC VT470/570/670 User's Manual* for a full description of all default settings.

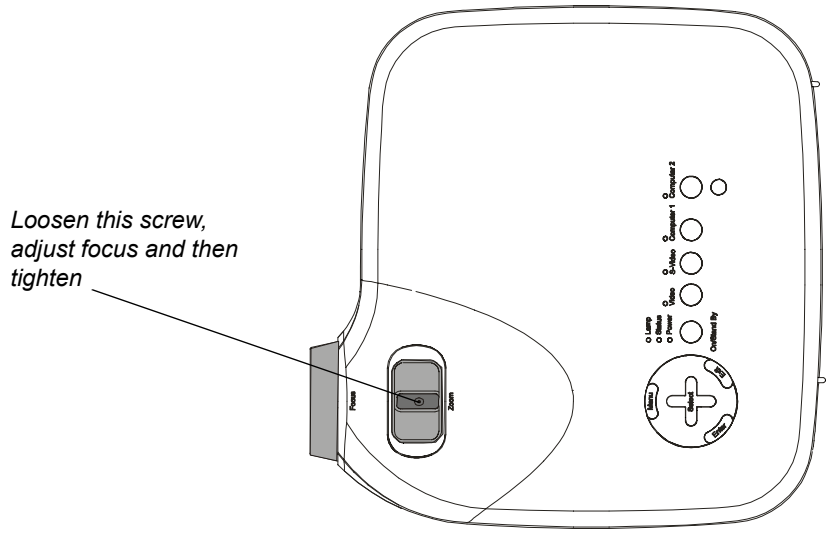
For information on projector maintenance and instructions on replacing the projector lamp and filter, turn to page 38.

## To adjust projector focus

1. Locate the zoom lever.

   **NOTE:** Use this lever rather than the white focus ring to adjust focus. See the previous page for more information on why you can't adjust the focus with the focus ring.

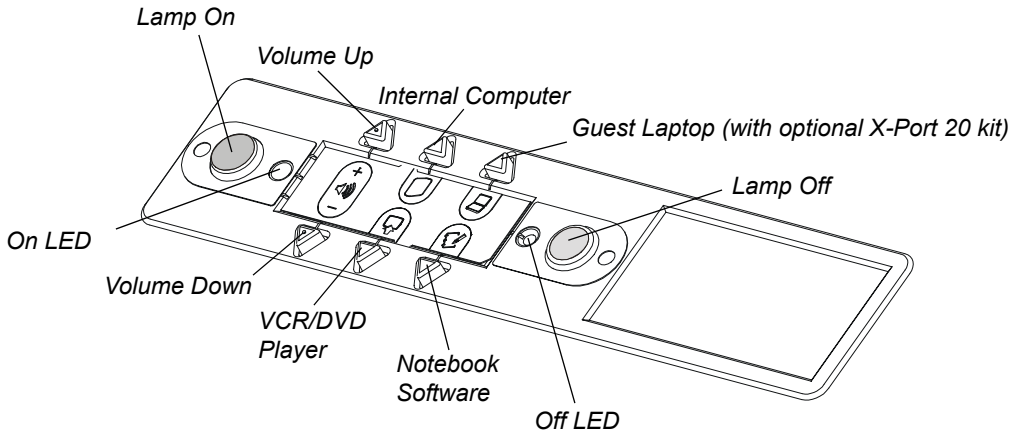
2. Using a 5/32" or 3/16" flat screwdriver, loosen the slot-head screw in the center of the focus lever.




3. Adjust the focus by moving the lever and then tighten the slot-head screw you loosened in the previous step.

## Control Panel

Use the Control Panel to turn the projector lamp on and off, change the display source for the projector, open Notebook software, and adjust the volume of the internal sound system.




***Control Panel***

### The Lamp On and Lamp Off Buttons

During normal operation, you should keep the projector turned on all the time. However, to conserve the lamp, put the projector into standby mode at the end of your session (or at the end of the day). In standby mode the projector lamp is turned off but the projector itself remains on.

To put the projector into standby mode, press the **Lamp Off** button on the Control Panel. For the next three minutes, the lamp is in a reversible standby mode. The screen appears black, even though the projector lamp remains on, allowing you to quickly restore the display by pressing any button on the Control Panel.

After three minutes, the lamp cools down for 60 seconds and is then turned off.

You can skip this three-minute reversible standby period by pressing and holding the **Lamp Off** button for three seconds. To turn on the projector lamp, press the **Lamp On** button.

**CAUTION**

The projector inside the 3000i has been designed for use under normal operating conditions only. Normal operating conditions are defined as product use that does not exceed 8 hours per day and 260 days per year. Exceeding these operating conditions could cause projector damage. Damage caused by such extended use will not be covered by the product warranty.

To maintain normal operating conditions, make sure the projector is in standby mode outside of normal, daily (8 hour) operation. In standby mode, the lamp is turned off, while the projector remains on. Be sure to press the **Lamp Off** button in the Control Panel at the end of the day, and your projector will remain in standby mode until you press the **Lamp On** button the next day.

**NOTE**: You can also configure the computer's power management settings so that after a period of idle time it stops sending out a video signal, turning off the projector lamp (page 24).

To determine the current status of the lamp, check the LEDs beside the **Lamp On** and **Lamp Off** buttons and then check the table below.

| Lamp On LED | Lamp Off LED | Lamp Status |
|---|---|---|
| Flashing quickly | Off | Lamp is turning on. During this 60-second period, the **Lamp On** and **Lamp Off** buttons are disabled. |
| Solid | Off | Lamp is on |
| Flashing occasionally (short flashes followed by long pauses) | On | Lamp is off |
| Off | Flashing very quickly | Lamp is in three-minute reversible standby mode. In this mode, the screen appears black but the projector lamp remains on, allowing you to quickly restore the display by pressing any button on the Control Panel. After three minutes, the lamp cools down for 60 seconds before turning off. |
| Off | Flashing slowly | Lamp is cooling down. This 60-second cool-down follows the three-minute reversible standby period. During this time, all Control Panel buttons are disabled. |

## Volume Control Buttons

Press the **Volume Up** (+) button to increase the volume and the **Volume Down** (–) button to decrease the volume.

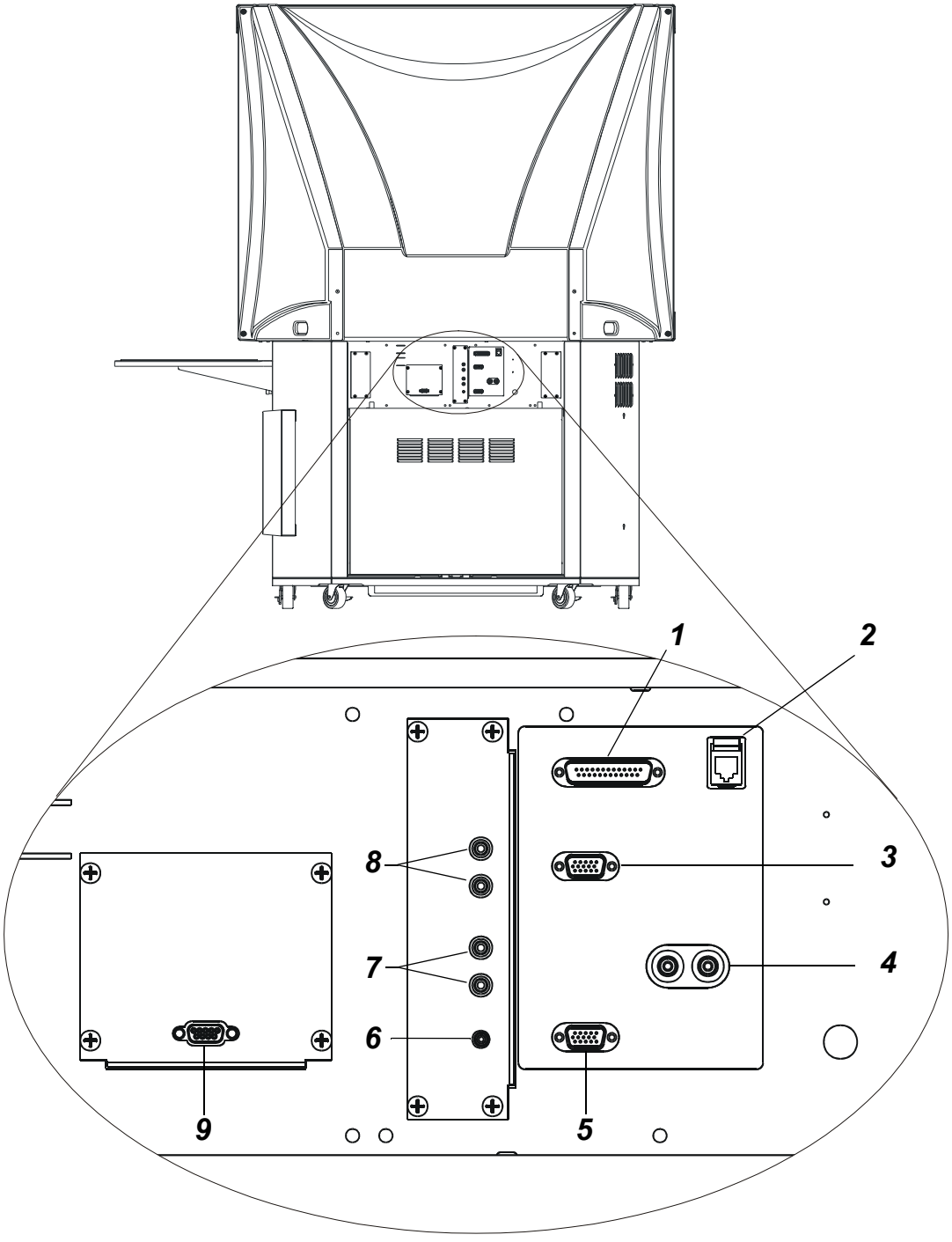
The default volume is 0. To restore this default, press the **Volume Up** (+) and **Volume Down** (–) buttons simultaneously.

## Source Buttons

Use the source buttons to switch the video and audio sources for the projector and cabinet audio amplifier.

| Button | Source |
|---|---|
| | VCR/DVD player |
| | Internal computer |
| | Guest laptop (only with the optional Guest Laptop Support kit) |
| | Notebook software. |

## Rear Features




*Close-up of Connection Panel*

## Connection Panel

The Connection Panel allows you to make a variety of external connections to the 3000i cabinet:

- A printer (1), dedicated to the internal computer
- A network (2), making the full resources of the network available to the internal computer
- An external projector (3), allowing projection of the internal computer or guest laptop (RGB output only) onto an auditorium-sized display for presentation to a large group
- A guest laptop (5, 6 and 9). Press the **Guest Laptop** button on the Control Panel to display the guest laptop input on the interactive whiteboard. If the SMART Board driver is installed, you can control the laptop by touching the board.

  **NOTE:** You can only connect to a guest laptop if you have installed the optional Guest Laptop Support kit.
- An external sound system (8), allowing audio rebroadcast to the room's sound system. The external sound system is then controlled by the Volume buttons on the Control Panel.

### Getting to Know Your Connectors

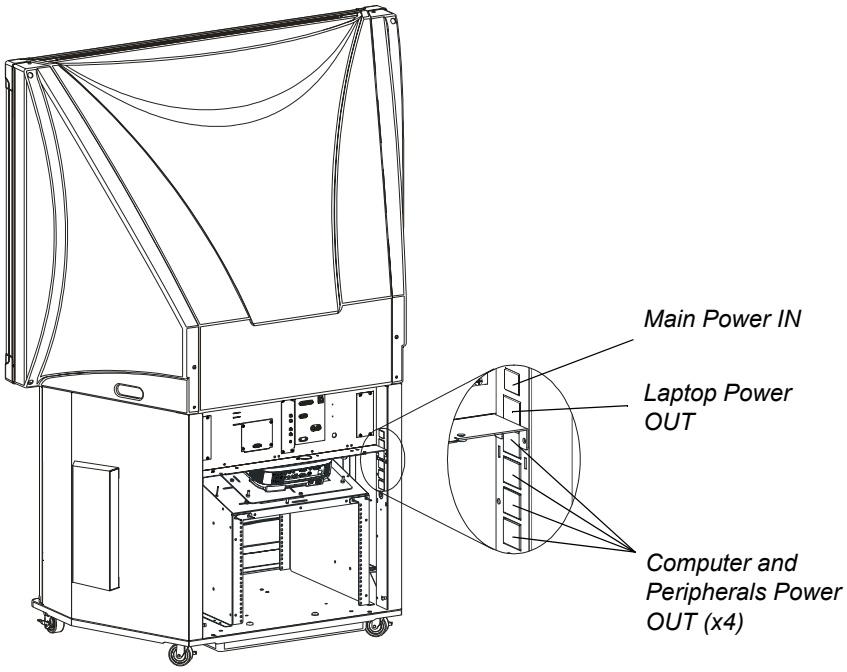
1. **Printer (Female)** – Use a DB25 printer cable (not provided) to connect an external printer that is dedicated solely to the internal computer.
2. **Network** – Use a standard male-to-male RJ45 network cable (not provided) to enable 10/100 BaseT networking with the internal computer.
3. **Video OUT (Female)** – Use an HD DB15 video cable (not provided) to connect an external projector or monitor to this video port (RGB output only).
4. **VCR/DVD Audio OUT** – These connectors are already linked via an RCA-to-RCA cable to the **Audio IN** jacks on the connection panel. These connectors are part of the link that connects the audio output of a VCR or DVD player to the projector. Keep the right and left channel connections correct for stereo sound.
5. **Computer 2 Video IN (Female)** – Only used if the optional Guest Laptop Support kit is installed. Connect the supplied DB15 video cable to this 15-pin connector (female). At the laptop end, connect the **Computer 2 Video** cable to the laptop's own 15-pin video port.
6. **Computer 2 Audio IN (Female)** – Only used if the optional Guest Laptop Support kit is installed. Connect the supplied 3.5 mm audio cable to this 3.5 mm jack. At the laptop end, connect the **Computer 2 Audio** cable to the laptop's 3.5 mm audio OUT.
7. **Audio IN** – These connectors are already linked via an RCA-to-RCA cable to the **VCR/DVD Audio** jacks on the connection panel. These connectors are part of the link that connects the audio output of a VCR or DVD player to the projector. Keep the right and left channel connections correct for stereo sound.
8. **Room Audio OUT** – Use standard RCA audio cables (not provided) to deliver unamplified sound mixed from the internal computer, guest laptop and VCR/DVD player to an external room sound system. Volume buttons on the Control Panel will control the volume of sound from the external speakers.

9. **Computer 2 Serial IN (Male)** – Only used if the optional Guest Laptop Support kit is installed. Connect the serial end of the **Serial/USB** adapter to this port. Connect the USB end of this adapter to the laptop's USB port. This connection enables touch control of the projected laptop contents on the interactive whiteboard.

## Main Power Input and Power Outputs

The Main Power IN and Power OUT connections are located to the right of the Connection Panel (as you face the rear of the cabinet).

- The **Main Power IN** provides power to the 3000i unit.
- The **Laptop Power OUT** may be used in conjunction with the optional Guest Laptop Support kit to provide power to a guest laptop.
- The four **Computer and Peripherals Power OUT** connections are for the internal computer and its peripherals. The cables from these four connections are fed inside the cabinet, where they are used for the internal computer and the projector, and the two spare cables may be used for peripherals such as VCRs, DVD players, and printers.




### Power Connections

**Main Power IN** – Connect the supplied IEC country-specific power cord to the Main Power Input and then connect the pronged end to an appropriate wall outlet.

**Laptop Power OUT** – Only used if the optional Guest Laptop Support kit is installed.

**Computer and Peripherals Power OUT (x4)** – The internal computer and connected peripherals can draw power from this series of IEC outlets, located inside the rear access panel. The supplied power cable for the internal computer is connected to one of these outlets. Connect the other end to the computer after you've installed it.

# Installation

This section of the manual describes how to:

- position the 3000i (this page)
- remove the rear access panel in preparation for computer installation (page 12)
- install and connect the internal computer (page 13)
- connect to a VCR and/or DVD player (page 15)
- connect to a printer (page 18)
- connect to a network (page 18)
- connect to an external sound system (page 19)
- connect to an external projector or monitor (page 19)

**NOTE:** If you have the optional Guest Laptop Support kit installed, you can also connect the 3000i to a guest laptop.

After you have installed the peripherals you require, you must finalize your installation before you can use the 3000i (page 21).

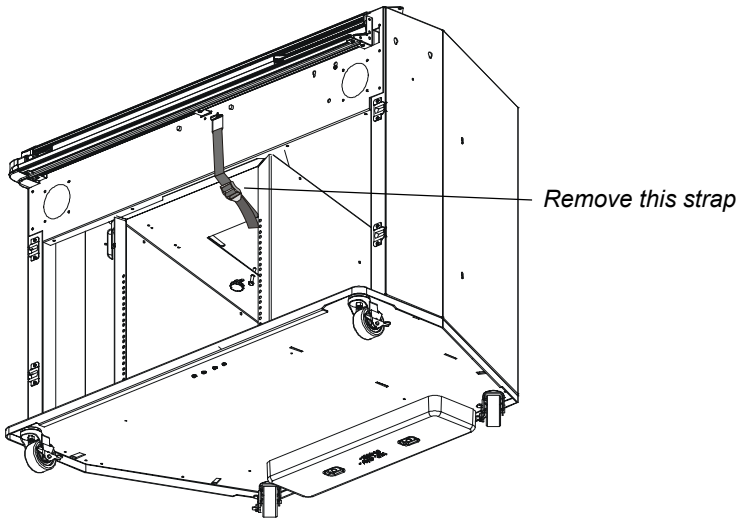
## Positioning the 3000i

1. Remove the unit from its shipping carton (following the *Unpacking Instructions*).
2. Unpack the contents of the shipping carton and wheel the system to an appropriate location within reach of a power source.

   **NOTE:** Leave sufficient space around the entire cabinet so you can comfortably access it as you perform the following assembly and connection procedures.

   **NOTE:** Unlock the casters by pressing up on the caster-lock tab; lock the casters by pressing down on this tab, as shown in the figure below. As a safety precaution and for greater ease of use, the casters should remain locked while the 3000i is in use.
3. Open the front doors and then unbuckle and remove the strap that secures the small mirror. You'll find this strap in the middle of the speaker panel and below the projector platform.

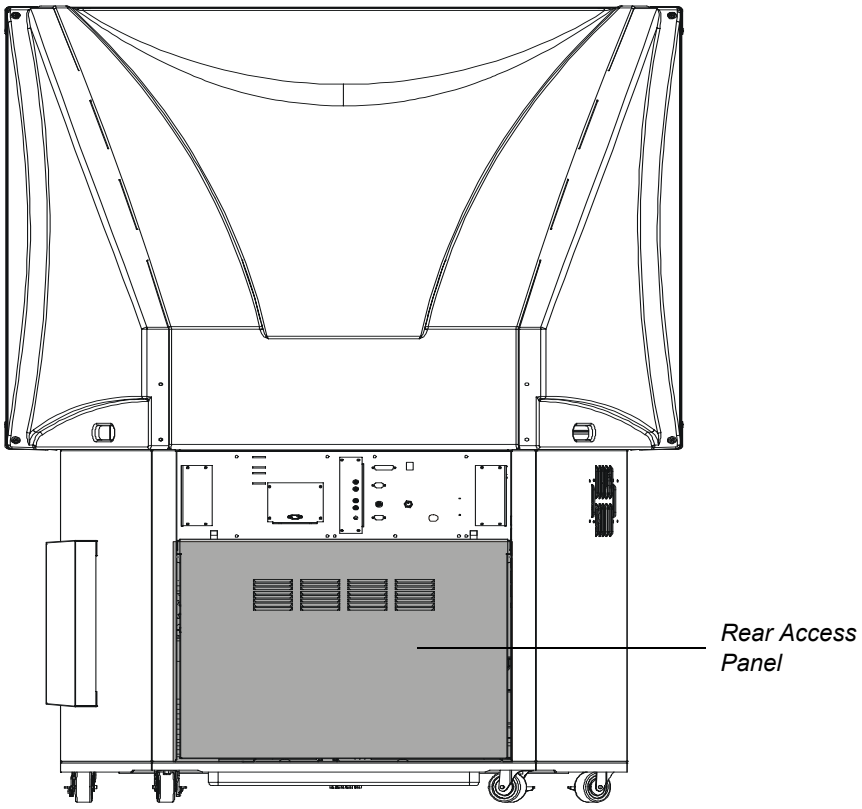
The small mirror is strapped securely in place to protect it during shipment. *You must remove this strap prior to use*.




***Location of Small Mirror Strap***

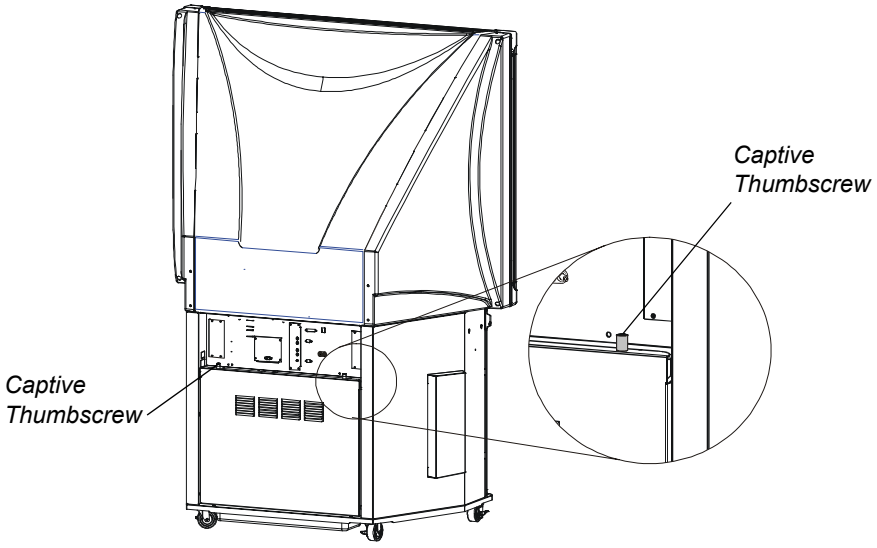
## Removing the Rear Access Panel

You must remove the rear access panel before you install your internal computer. Once you've turned on the projector and internal computer, you should replace the rear access panel—as well as lock the cabinet front doors—as a security precaution.



### To remove the rear access panel

1. Loosen the two captive thumbscrews at the top of the rear access panel.




2. Rotate the top of the rear access panel toward you and then pull it upwards, releasing it from the cabinet.

## Installing and Connecting the Internal Computer

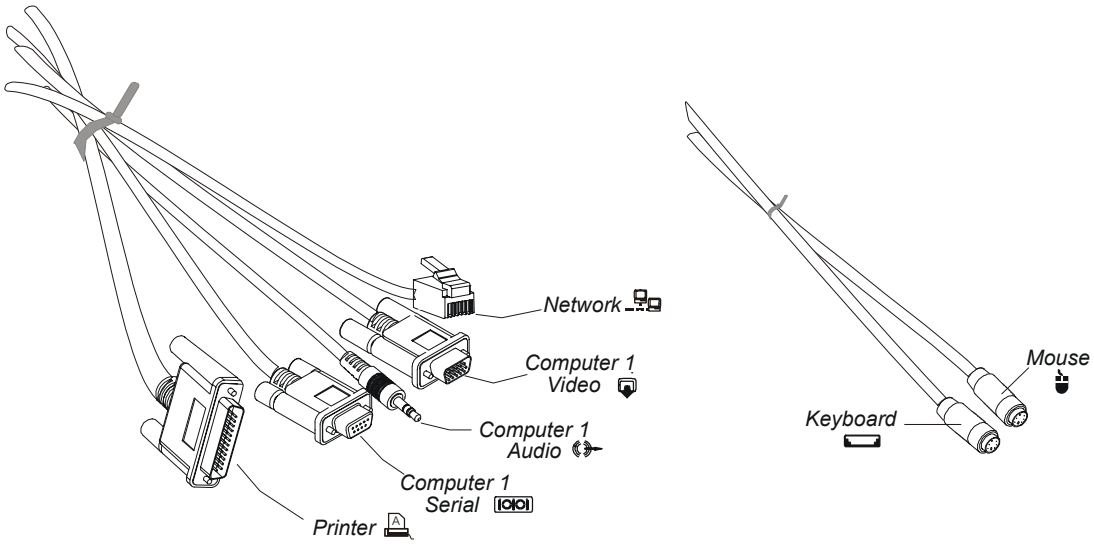
**NOTE:** If you ordered the optional Guest Laptop Support kit, and you're installing the Guest Laptop shelf on the computer side of the cabinet, install the shelf (page 67) before you install the computer. The plastic hole covers are much easier to remove when the computer is not inside.

### To position, secure and connect the computer

1. Slide the computer into place above the computer straps and then use the straps to secure it.

   **NOTE:** The straps allow you to roll the cabinet from room to room without removing the computer. However, these straps will not secure the computer in place during cabinet shipment. If you ship the cabinet, remove the computer first.

2. Locate the tie-wrapped bundle of labeled cables dangling inside the cabinet. In addition to this cable bundle, AC power, keyboard and mouse cables are located nearby.




***3000i Computer Cables***

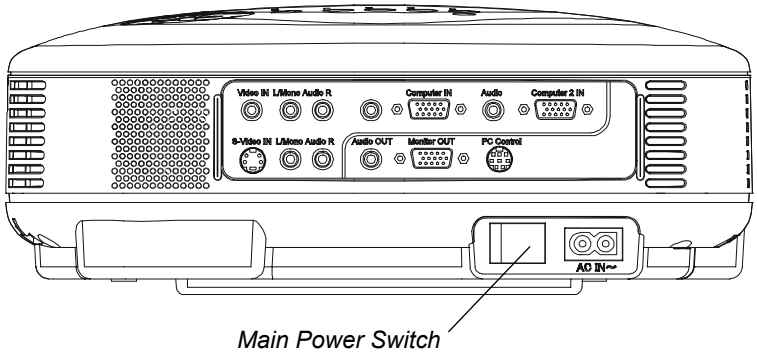
3. Connect the **Computer 1 Video** cable to the Monitor Video connector.
4. Connect the **Computer 1 Audio** cable to the Audio Line OUT.
5. Connect the **Computer 1 Serial** cable to an available port.
6. Connect the **Printer** cable to the 25-pin parallel port (printer) connector.
7. Connect the **Network** cable to the network card (if applicable).
8. Connect the **Mouse** and **Keyboard** cables to the PS/2 mouse port (identified by a mouse symbol) and the PS/2 keyboard port (identified by a keyboard symbol).

### To connect the power cable

Connect the AC cord in the accessory box to the power inlet at the rear of the 3000i. Then connect this AC cord to an available power outlet or power bar (not supplied).

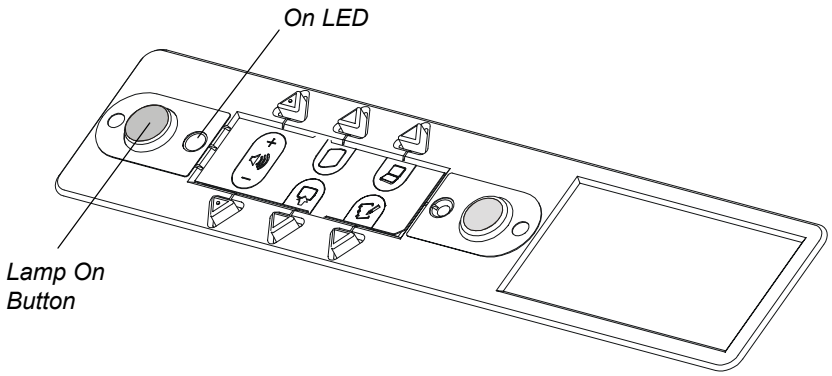
## Turning on the Projector and the Computer

1. If the projector is not on, press the main power switch on the projector.



2. Turn on the computer.
3. Turn on the projector lamp by pressing the **Lamp On** button on the Control Panel (to the right of the pen tray).

   The LED indicator beside this button flashes quickly for 60 seconds and then remains steadily illuminated when the projector lamp has turned on.




***The Control Panel***

   **NOTE:** For more information about turning on the 3000i, see page 29.

4. When an image displays, adjust the computer power settings and the image alignment on the interactive screen. Then install the SMART Board software CD, configure the COM port, and perform a brief orientation procedure. All these procedures are described in *Finalizing the Installation* on page 21.

   **NOTE:** You should leave the computer and the projector on at all times (so the projector is either in use, with the lamp illuminated, or in standby mode). However, you can set the computer to save power during periods of inactivity (page 31).

## Connecting to a VCR and/or DVD Player

To connect a VCR to the projector, use either the composite video cable or the S-video cable bundled inside the cabinet. To connect a DVD player to the projector, use the S-video cable bundled inside the cabinet. You can then switch the display source to the VCR or DVD player by pressing the **VCR/DVD Player** button on the control panel.

**NOTE:** If you wish to connect both a VCR and a DVD player to the projector, you must use the composite video cable for the VCR and the S-video cable for the DVD player. If both are connected, pressing the **VCR/DVD Player** button alternates the display source between the VCR and the DVD player. There is a three-second delay before the alternate display source appears.

Although you can't connect the audio cables bundled inside the cabinet to both the VCR and the DVD player, you can "daisy chain" the audio connections—that is, you can connect audio cables between the DVD player and the VCR, and then between the VCR and the projector (page 17). This linked audio connection makes the audio source switch automatically when you switch the video sources.

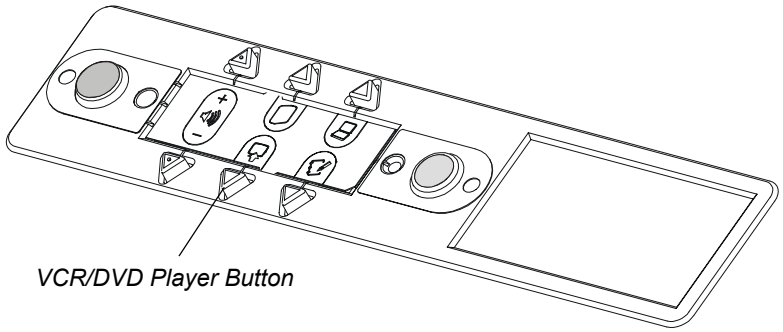
**NOTE**: When you switch to another source (such as the internal computer), and then press the **VCR/DVD Player** button, the last active video source will always appear.

## To connect to a VCR

1. Turn off the VCR.
2. Connect the RCA composite video cable bundled inside the cabinet to the **Video OUT** jack on the VCR. This jack may be labeled “To Monitor”.

   **NOTE:** If your VCR has an S-video output, you can connect the S-video cable bundled inside the cabinet to the VCR. However, if you use the S-video cable to connect to the VCR, you won’t be able to use it to connect to a DVD player.
3. Connect the red and white RCA stereo audio cables bundled inside the cabinet to the **RCA Audio** (or **Audio OUT**) outputs on the VCR. Keep your right and left channel connections correct for stereo sound.

   **NOTE:** You can’t connect these audio cables to both the VCR and the DVD player. However, you can link the audio connections of the DVD player and VCR (page 17).
4. Connect the power cable to an available outlet or power bar.
5. Turn on the projector.
6. Press the **VCR/DVD Player** button on the Control Panel.



*VCR/DVD Player Button*

7. Turn on the VCR and press the **Play** button.

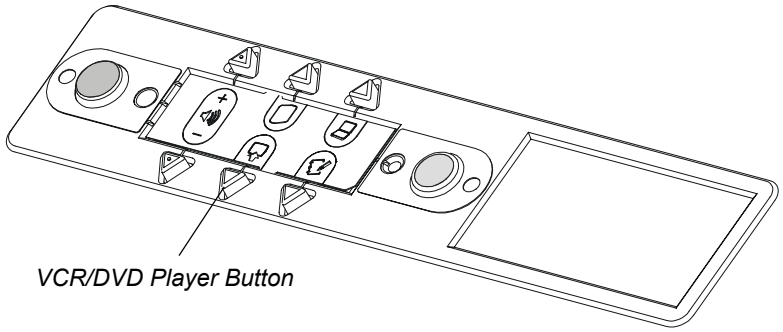
## To connect to a DVD player

1. Turn off the DVD player.
2. Connect the S-video cable bundled inside the cabinet to the **S-video OUT** port on the DVD player.

   **NOTE:** Alternatively, you can connect the RCA composite video cable bundled inside the cabinet to the DVD player. However, the S-video cable gives better quality images than the composite video cable.
3. Connect the red and white RCA stereo audio cables bundled inside the cabinet to the **RCA Audio** (or **Audio OUT**) outputs on the DVD player. Keep your right and left channel connections correct for stereo sound.

   **NOTE:** You can’t connect these audio cables to both the VCR and the DVD player. However, you can link the audio connections of the DVD player and VCR (page 17).
4. Connect the power cable to an available outlet or power bar.
5. Turn on the projector.

6. Press the **VCR/DVD Player** button on the Control Panel.

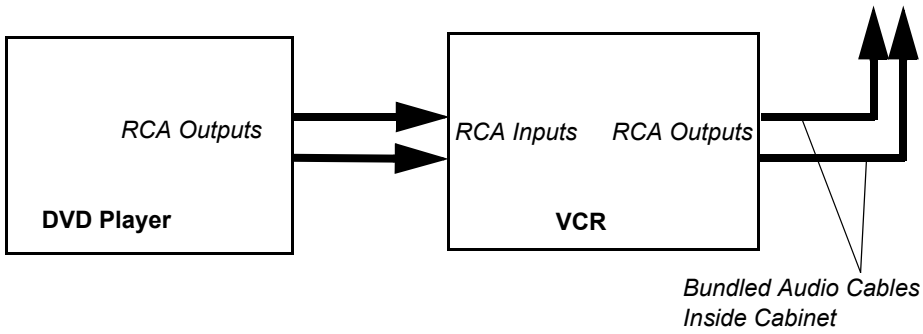



7. Turn on the DVD player and press the **Play** button.

## To link VCR and DVD player audio connections

**NOTE**: Make sure there is no tape in the VCR before you proceed.

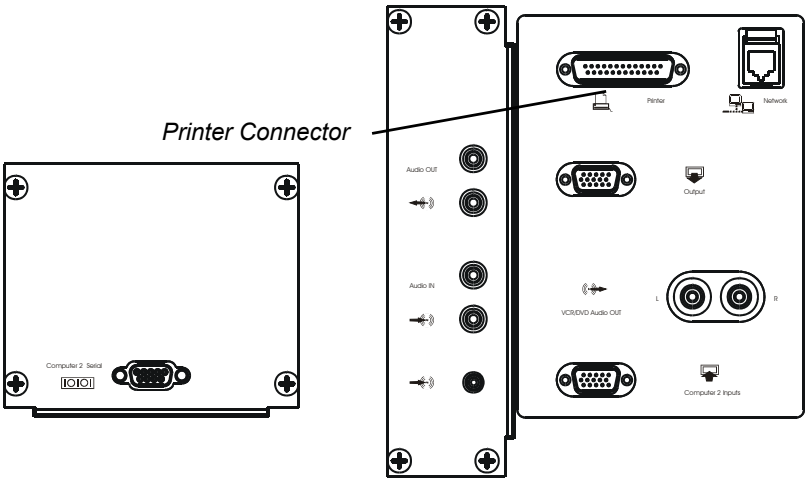
1. Connect standard red and white RCA stereo audio cables (not provided) from the **RCA Audio** (or **Audio OUT**) outputs on the DVD player to the **RCA Audio** (or **Audio IN**) inputs on the VCR. Keep your right and left channel connections correct for stereo sound.
2. Connect the red and white RCA stereo audio cables bundled inside the cabinet to the **RCA Audio** (or **Audio OUT**) outputs on the VCR. Keep your right and left channel connections correct for stereo sound.



## Connecting to a Printer

### To connect to a printer

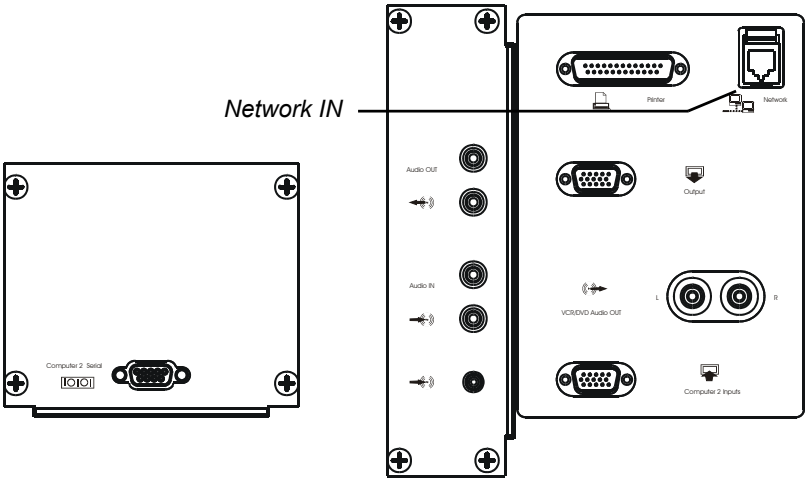
Connect a standard DB25 printer cable (not provided) from the printer's parallel port to the **Printer Connector** on the Connection Panel.




## Connecting to a Network

### To connect to a network

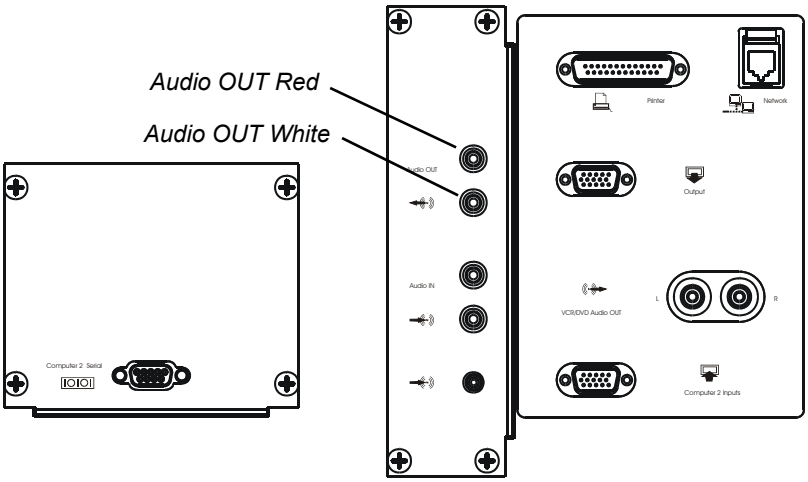
Connect a standard male-to-male RJ45 network cable (not provided) from the network cable wall outlet to the **Network IN** connector on the Connection Panel.



## Connecting to an External Sound System

### To connect to an external room sound system

Connect standard red and white RCA audio cables (not provided) from the RCA Audio Inputs on the external sound system to the two **Audio OUT (L/R)** jacks on the Connection Panel. Keep your right and left channel connections correct for stereo sound.

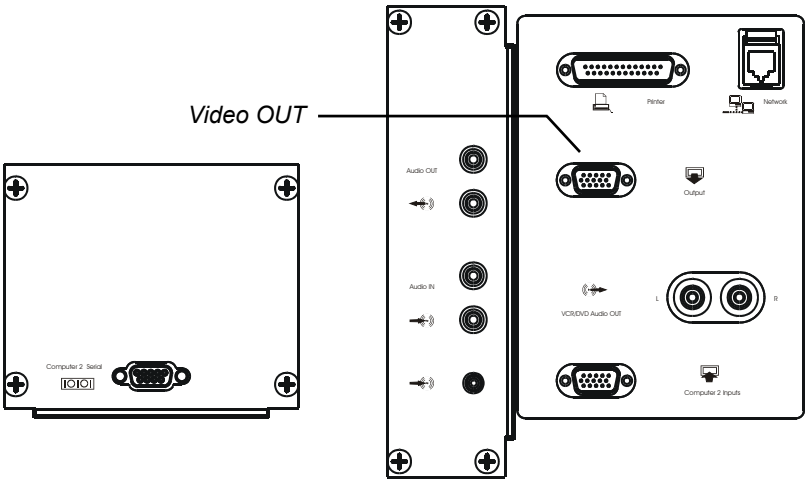



## Connecting to an External Monitor or Projector

### To connect to an external projector or monitor

Connect an HD DB15 video cable (not provided) from the external projector or monitor to the **Video OUT** port in the Connection Panel.

**NOTE:** This connection is for RGB output only.



# Finalizing the Installation

With your computer and projector on, finish setting up your 3000i by:

- adjusting the projected image (this page)
- configuring the computer settings (page 24)
- installing SMART Board software on any connected computer (page 25)
- configuring the computer port (page 26)
- orienting the interactive whiteboard (page 26)

After you've made these adjustments and configurations, your 3000i is ready to use.

## Adjusting the Projected Image

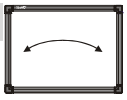
**CAUTION**

Do *not* adjust the white ring that surrounds the short-throw, customized projector lenses, even though the *NEC VT470/570/670 User's Manual* states that you should use this ring to obtain the best focus. You must disregard this information.

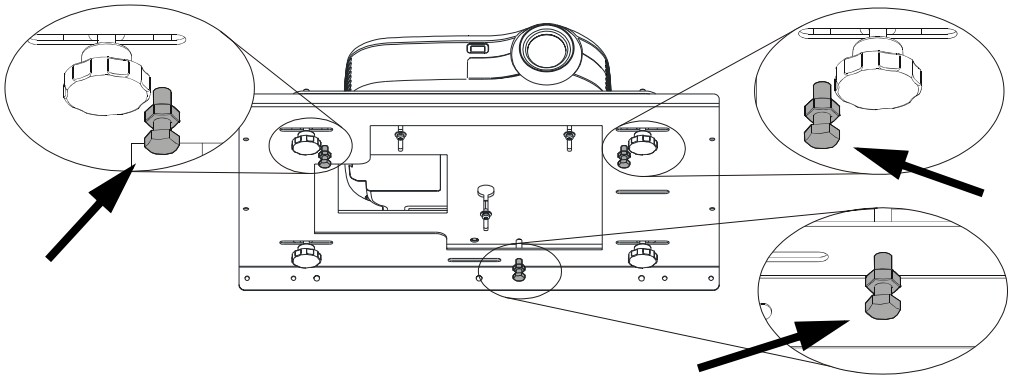
Rather, use the Zoom lever on the projector, which has been modified to adjust the image focus. Again, contrary to the *NEC VT470/570/670 User's Manual*, the Zoom lever will not adjust the image size on the screen.

You may need to make a few final adjustments to the projector to ensure a focused image that fits on the interactive whiteboard screen. While making these adjustments, check both the reflection in the small mirror and the actual image on the screen. For the best image, the reflection must be in the center of the small mirror and each side must be symmetrical.

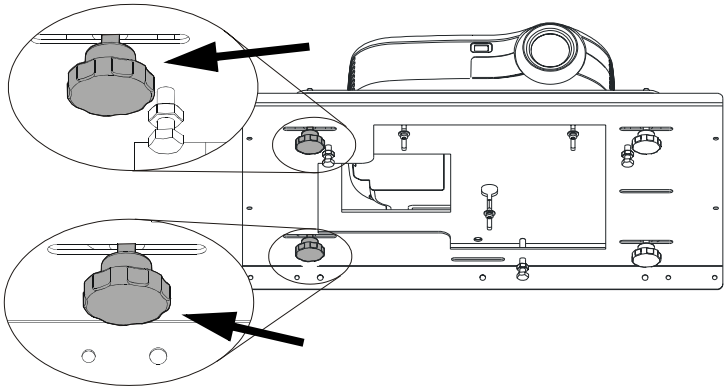
### To adjust roll



1. Locate the screws and knobs on the projector plate.
2. Loosen the three screws identified in the figure below.



3. Tighten or loosen the knobs on the left of the projector plate until you have the required roll adjustment. Adjust these knobs by the same amount or else you will change the vertical adjustment of the image (page 23).

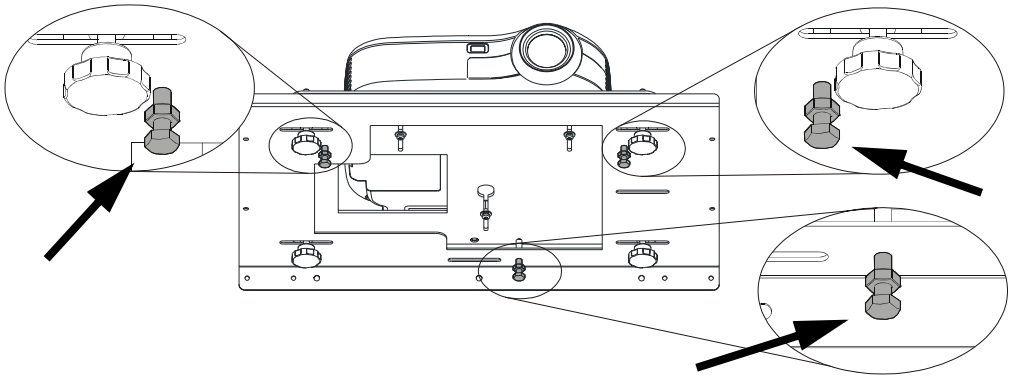


**NOTE:** If you can't tighten the knobs on the left of the projector plate, you can adjust the roll by loosening the knobs on the right of the projector plate

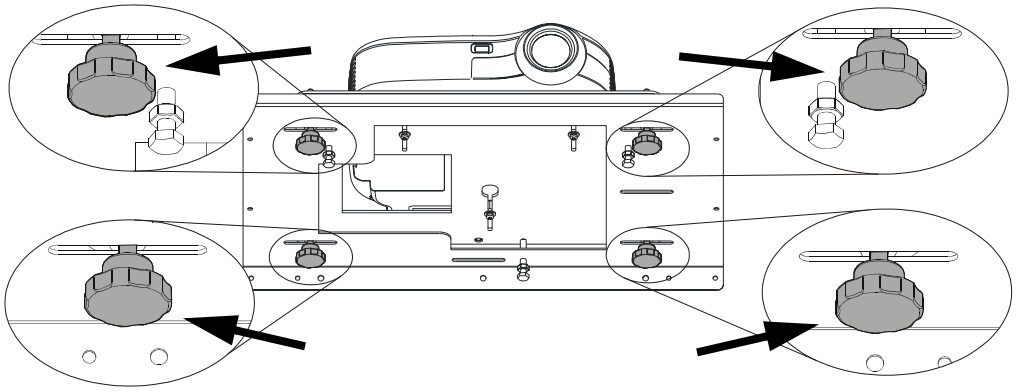
4. Tighten the three screws that you loosened in step 2.

## To adjust the image laterally

1. Locate the screws and knobs on the projector plate.
2. Loosen the three screws identified in the figure below.



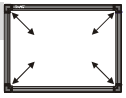
3. Loosen the four knobs identified in the figure below.



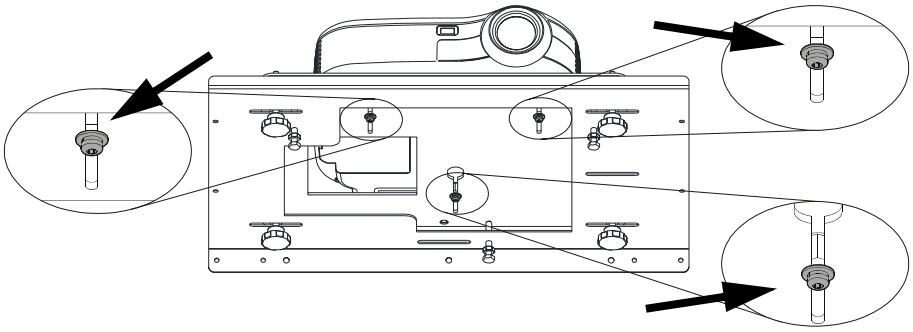
4. Slide the projector laterally to the required position.

5. Tighten the four knobs.
6. Tighten the three screws that you loosened in step 2.

## To change the image size

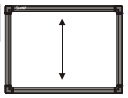


1. Locate the three security screws in the projector plate. These are illustrated in the figure below.

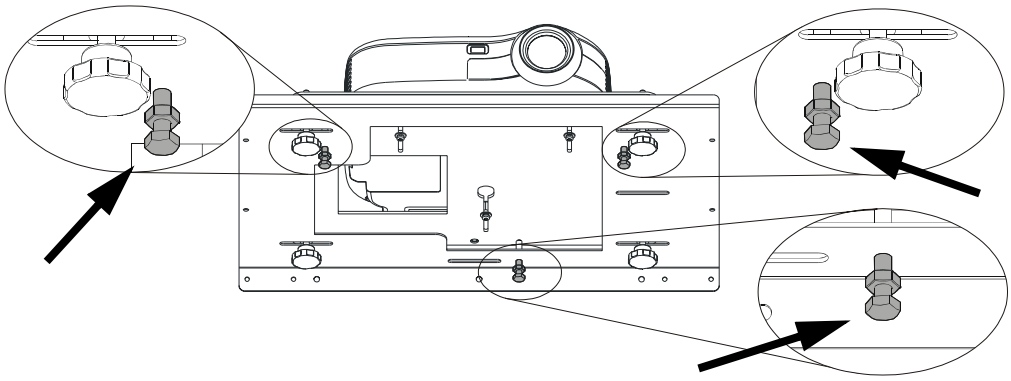


2. Loosen these screws using the TORX® key in the accessory kit.
3. Slide the projector backward or forward.
4. When your image is the correct size, tighten the security screws.

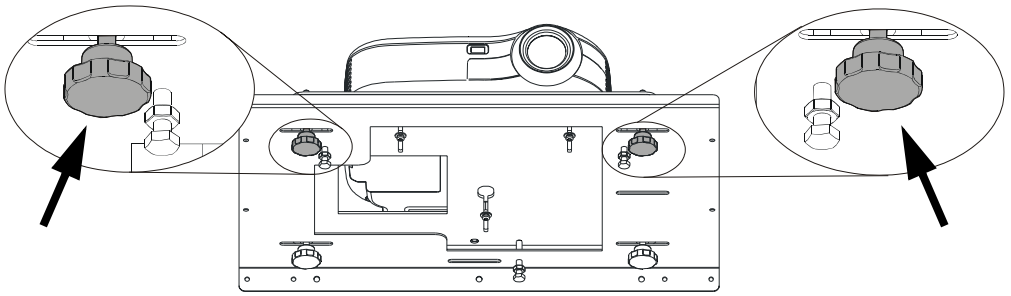
## To move the image up or down



1. Locate the screws and knobs on the projector plate.
2. Loosen the three screws identified in the figure below.



3. Tighten or loosen the knobs at the front of the projector plate until you have the required vertical adjustment. Adjust these knobs by the same amount or else you will change the roll adjustment of the image (page 21).



**NOTE:** If you can't tighten the front knobs any further, you can change the vertical adjustment by loosening the knobs at the back of the projector plate.

4. Tighten the three screws that you loosened in step 2.

## Configuring the Computer Settings

For optimal configuration of the 3000i, use these recommended settings for the computer inside the 3000i. With these settings, you can balance ease of use with conservation of energy and preservation of projector lamp life.

For example, you can configure the power management and energy saving settings of your computer so that it stops sending out a video signal and turns off the hard drive(s) after a period of inactivity. Your projector goes into standby mode if it doesn't receive a video signal for 30 minutes. Even though the projector and the 3000i are in standby mode, you can press the **Lamp On** button to quickly return both units to their normal operating states.

### Recommended Settings

You should keep the internal computer on all the time, but set it to turn off the monitor **after 1 hour** of inactivity, and to put the hard disk(s) into standby mode **after 2 hours**. This extended time period avoids an unexpected computer shutdown during presentations, video-conferences or lengthy meetings with gaps in computer activity.

When the computer is the 3000i's active display source and this period of inactivity for the monitor is reached, the computer stops sending an RGB video signal to the projector. This lack of a video signal triggers the projector to wait for 30 minutes, and then go into standby mode.

**NOTE:** If the input source for the projector is the video source (either composite or S-video), the projector will not go into standby mode.

To change the settings on a Windows computer, access the **Properties** dialog box for your display and adjust the energy saving features and the power management properties.

For Macintosh computers, adjust the settings in your **System Preferences** application. For precise instructions on changing these settings, read the documentation that came with your operating system.

**TIP**

If you decide to keep your computer on all the time, you should occasionally restart it to reload the operating system.

**NOTE:** Windows NT 4.0 doesn't support these power settings, so you must leave the computer on with full power or shut it down at the end of the day.

### Matching the Computer Resolution to the Projector Resolution

It's very important that the computer and projector resolutions match so the projected image properly fills the screen. The projector resolution is 1024 × 768 (XGA) and you must ensure the computer's resolution matches this.

**NOTE:** If the computer resolution is set to anything other than this optimal resolution, you may not see the entire image or the image may be too small to fill the screen, even with further adjustments.

Use the information here as a guideline when you adjust your computer. For precise instructions, read the documentation for your operating system. Also, if the image on the interactive whiteboard is too distorted to see, use a computer monitor to adjust this setting.

### To adjust the resolution setting for your Windows computer

1. Select **Start > Settings > Control Panel** and then double-press **Display**.
2. In the *Display Properties* dialog box, press the **Settings** tab.
3. Move the slider to a screen resolution of **1024 × 768** and then press **OK**.

### To adjust the resolution setting for your Macintosh computer (Mac OS X operating system)

1. Press the **System Preferences** icon in the Dock.
2. Double-press **Displays**.
3. Select **1024 × 768** and close the dialog box.

## Installing SMART Board Software

The installation should start automatically after you insert the SMART Board software CD into your CD drive.

### To install SMART Board software for Windows operating systems

1. Insert the SMART Board software CD into your CD drive.

   The SMART Board software setup program should start automatically. If it doesn't, select **Start > Run** and enter **x:\autorun.exe** (where x: is your CD drive). Follow the on-screen instructions to install SMART Board software.

   **NOTE:** At the end of the SMART Board software installation, you'll be asked if you want to put the **SMART Board** icon in your Startup Folder. We recommend that you say yes. The SMART Board tools will always be open, and your interactive whiteboard will be fully functional without any further action whenever you turn on your system.
2. Press **Yes** to install the **SMART Board** icon in the Startup folder, or press **No** to prevent SMART Board software from starting whenever you turn on your system.

### To install SMART Board software for Macintosh computers

1. Insert the SMART Board software CD into your CD drive.
2. Double-press the **SMART Installer** icon.

   The *SMART Installer* window appears.
3. Press the **Continue** button and then follow the instructions on your screen.

## Configuring the Computer Port

After installing SMART Board software, you must specify which port on the internal computer is occupied by the interactive whiteboard serial or USB connection. If you're running SMART Board driver 6.0 (or later), the COM port configuration process is entirely automatic.

However, you may need to manually configure the COM port if:

- the Windows operating system you're running does not perform plug and play (e.g., Windows NT 4.0 or ME)
- the Windows operating system fails to announce that it has Found New Hardware

### To select a COM port for the interactive whiteboard

1. Press the **SMART Board** icon in the system tray (Windows computers) or in the Dock (Macintosh computers), and select **Control Panel**.
2. Select **SMART Board Settings**.

   The *SMART Board Settings* dialog box appears.
3. Press the **Add SMART Board** arrow button and select **Manually choose COM port**.

   The *Select COM Port* dialog box appears.
4. If you know which port you connected the interactive whiteboard to, select it from the list and press **Select**.

   OR

   If you're unsure of the correct port, click the **Detect SMART Hardware** button. SMART Board software locates the correct port for the attached interactive whiteboard.

   The Ready Light in the pen tray should change to green to indicate that the interactive whiteboard is now touch sensitive.

## Orienting the Interactive Whiteboard

By orienting the interactive whiteboard, you ensure that the computer accurately tracks your contact with the screen. Although SMART Board software assigns a default orientation to your interactive whiteboard that is normally adequate, you may want to perform an orientation to ensure the greatest possible level of accuracy.

The default orientation level is a 9-point, Standard orientation. If you find this level isn't precise enough, use the Fine orientation level. You may also use the Quick, 4-point orientation level.

### To orient your interactive whiteboard (default Standard orientation)

1. Press the **SMART Board** icon in the system tray (Windows computers) or in the Dock (Macintosh computers), and select **Orient**.

   The orientation screen appears.
2. Follow the on-screen instructions, pressing your finger squarely on each cross.

   **NOTE:** If you press on the crosses out of sequence or inaccurately, a *Bad Orientation Point* dialog box appears. *Use the mouse* to click **OK**, because touch awareness isn't available.

3. When the orientation screen disappears, test the orientation by moving your finger across the interactive whiteboard. The pointer should track your finger very closely and appear directly beneath the center of your fingertip.

   **NOTE:** If the pointer doesn't accurately track your finger, you may need to calibrate the digital cameras (page 40).

### To orient using the Fine (20-point) or Quick (4-point) orientation levels

1. Press the **SMART Board** icon in the system tray (Windows computers) or in the Dock (Macintosh computers), and select **Control Panel**.
2. Select **SMART Board Settings**.
3. From the **Hardware Info & Settings** drop-down list, select **Alignment/Orientation Precision**.
4. Press **Quick (4 points)** or **Fine (20 points)**.
5. Press **OK**.
6. Perform the 4-point or 20-point orientation.

   **NOTE:** This setting will remain in effect for all subsequent orientations until you perform steps 1–5 again and restore the default (Standard) orientation or otherwise change the orientation level.

# Basic Operations

This section describes the following 3000i operations:

- Turning on the 3000i (this page)
- Putting the 3000i into standby (page 31)
- Adjusting the volume (page 32)
- Changing the projector display source (page 33)
- Using the interactive whiteboard (page 34)

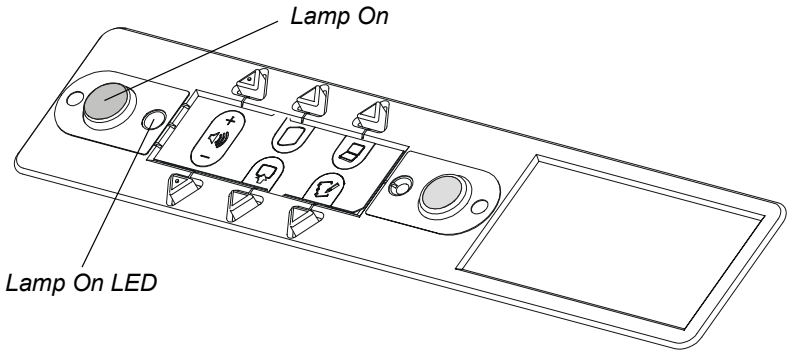
## Turning on the 3000i

You should keep the projector on at all times. However, to conserve the projector lamp, press the **Lamp Off** button on the Control Panel at the end of your session (or at the end of the day). For ease of operation, you should also keep the computer on all the time. By doing this, you can turn on the 3000i by restoring power to the projector lamp (press the **Lamp On** button on the Control Panel) and then entering your user name and password at the logon screen.

**NOTE:** To preserve the computer's hard drive(s) and the projector lamp, you may want to put the computer hard drive and the monitor (interactive screen) into standby mode (page 31).

### To turn on the 3000i

1. If the screen is black, press the **Lamp On** button on the Control Panel to turn on the projector lamp. The Lamp On LED indicator should blink quickly for approximately 60 seconds and then remain illuminated when the lamp is fully powered up.




2. If you see a logon screen, use the connected keyboard to enter your logon ID and password and then press the **OK** button.

   OR

   If the screen turns from black to blue—and no logon screen appears—you may need to turn on the computer or restore it from a standby setting. Turn the computer on or press the computer's reset button.

## Startup Scenarios

The following table describes what you may need to do to restore the 3000i to a fully operational state.

| What You See | What You Should Do |
|---|---|
| • Screen is black<br>• On LED is blinking intermittently (short flashes between long pauses) | The projector is in standby mode (with the lamp off).<br>• Press the **Lamp On** button on the Control Panel. The Lamp On LED indicator blinks quickly as the lamp warms up and, after approximately 60 seconds, either a blue *No Input* screen appears (see immediately below) or the screen is restored to its last active state. |
| • Blue *No Input* screen<br>• On LED is steadily illuminated | The projector lamp is turned on, but the computer is either off or in standby mode, or you've selected an inactive display source.<br>• Press a key on the computer's keyboard to activate the computer. The logon screen appears.<br>OR<br>Press a source button on the Control Panel to change to an active source.<br>**If the blue *No Input* screen remains:**<br>1. Turn the computer on (or press the computer's reset button). The logon screen appears.<br>2. Log on as usual (using the connected keyboard). |
| • Screen is black<br>• On LED is blinking slowly | No action is necessary. The projector lamp is turning on, and the logon screen will appear after approximately 60 seconds. |
| • Screen is black<br>• Off LED is blinking rapidly | The projector lamp is in reversible standby mode. If you don't press a button to restore the image, after three minutes the On LED indicator will blink slowly for 60 seconds as the lamp turns off and cools down. At this point, follow the first set of instructions in this table to restore the 3000i to an operational state. |
| • Logon Screen | The projector lamp is still on, so you can log on as usual (using the keyboard) |
| • Lamp On LED continues to blink intermittently, even though it's been pressed to start the system | Projector problems are preventing a normal projector lamp warm-up. Examine the projector status LED indicator, and then consult the troubleshooting section of the *NEC VT470/570/670 User's Manual*. |
| • The Lamp Off and On LEDs are both flashing constantly | The 3000i can't detect a projector. Check the *NEC VT470/570/670 User's Manual* to make sure the projector is connected properly. |

## Putting the 3000i into Standby

For normal operation, you don't need to turn off the computer or the projector at the end of a session or at the end of the day. Just log off the computer (for security) and then turn off the projector lamp (to conserve its life) by pressing the **Lamp Off** button on the Control Panel.

**CAUTION**

The projector inside the 3000i has been designed for use under normal operating conditions only. Normal operating conditions are defined as product use that does not exceed 8 hours per day and 260 days per year. Exceeding these operating conditions could cause projector damage. Damage caused by such extended use will not be covered by the product warranty.

To maintain normal operating conditions, make sure the projector is in standby mode outside of normal, daily (8 hour) operation. In standby mode, the lamp is turned off, while the projector remains on. Be sure to press the **Lamp Off** button in the Control Panel at the end of the day, and your projector will remain in standby mode until you press the **Lamp On** button the next day.

**NOTE**: You can also configure the computer's power management settings so that after a period of idle time, it stops sending a video signal, turning off the projector lamp (page 24).

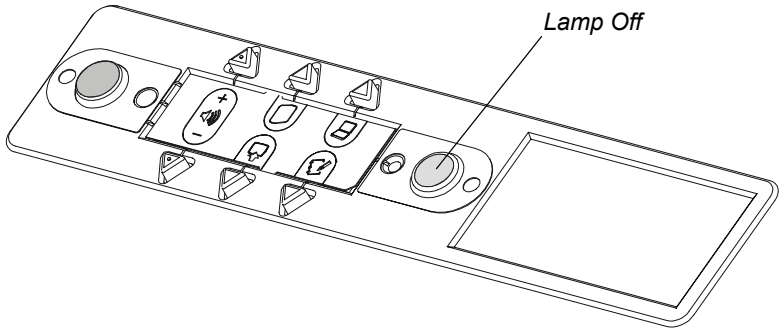
**NOTE:** If you won't use the 3000i for an extended period of time, you should turn off the computer and the projector.

### To put the 3000i into standby

1. Log off by selecting **Start > Shut Down**.

   **NOTE:** Logging off enhances system security. It also gives users a consistent initial interface—the system logon screen—when they turn on the projector lamp.

2. Press the **Lamp Off** button to put the projector into reversible standby mode for three minutes.




***Lamp Off Button on the Control Panel***

While the screen appears black, the projector lamp remains on for three minutes so you can immediately restore the image (if necessary) by pressing any button on the Control Panel. After three minutes have elapsed, the lamp cools down for 60 seconds and then turns off.

To skip the three-minute reversible standby period, press and hold the **Lamp Off** button for three seconds. Release the button and the lamp enters a 60-second cool down period and then turns off.

Perform this procedure at the end of a meeting or presentation and at the end of the day. If you prefer, you can also shut down the computer. However, for greater ease of use, we recommend simply logging off rather than shutting down the computer.

### To turn off the projector (if unused for an extended period)

1. Log off (as described above) and turn off the computer.
2. Press the **Lamp Off** button on the Control Panel.

   The Lamp Off LED indicator blinks rapidly for three minutes (reversible standby), and then slowly for approximately 60 seconds while the lamp cools down. When the lamp is off, the Lamp On LED indicator blinks very slowly.

   OR

   Press and hold the **Lamp Off** button for three seconds. The lamp immediately turns off and enters a 60-second cool-down period.
3. When the cooling fan stops, flip the power switch on the back of the projector.
4. Disconnect the 3000i power cable from the wall power outlet.

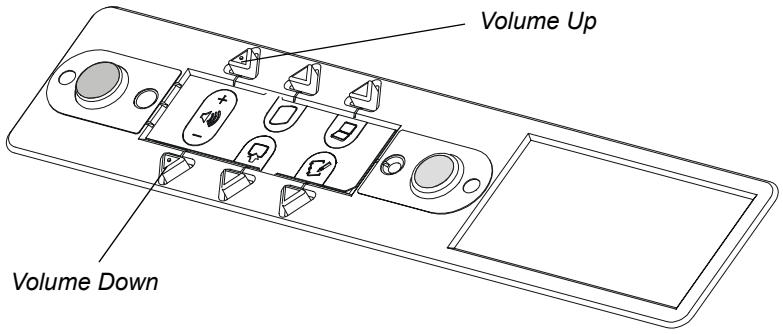
## Adjusting the Volume

Volume adjustments are made for the active display source and are made independently of other sources. When you switch to another input source, the 3000i retains the settings you made for the first input source (for when you switch back).

### To adjust the volume

Press and hold the **Volume Up** (🔊 +) button on the Control Panel to increase the volume for the current source.

Press and hold the **Volume Down** (🔊 –) button on the Control Panel to decrease the volume for the current source.




### To restore default volume level (no sound)

Press and hold both **Volume** buttons simultaneously.

### To fine-tune the projected image

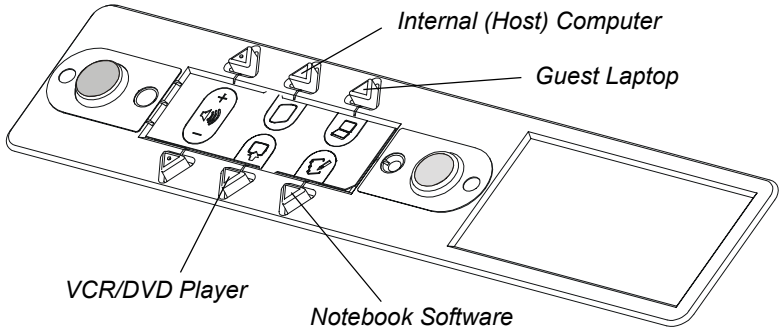
When you first connect the projector, you may need to fine-tune the image. To automatically optimize the image in RGB mode, press the **Auto Adjust** button on the projector's remote control. This will eliminate vertical banding, flickering, video noise, dot interference and cross talk.

## Changing the Display Source for the Internal Projector

You can change the video and audio input source for the internal projector using the three source buttons on the Control Panel. Choose from:

- the host computer
- a connected guest laptop or external computer (with the optional Guest Laptop Support kit)
- a VCR or DVD player

When the internal computer source is active, you can also make Notebook software instantly appear by pressing the **Notebook Software** button on the Control Panel.




**NOTE:** Switching sources takes a few seconds and during that time all buttons on the Control Panel are disabled.

### To switch to the connected VCR or DVD player

Press the **VCR/DVD Player** button on the Control Panel.

If both a VCR (composite video connection) and a DVD player (S-video connection) are connected to the projector, pressing this button switches the display between the two. There is a three-second delay before the alternate display source appears.

When you switch to another source (for example, the internal computer) and then press the **VCR/DVD Player** button, the video source that was last active appears. For example, if you were viewing a DVD and then switched to the computer, the DVD player will be the display source the next time you press the **VCR/DVD Player** button.

### To switch to the internal computer

Press the **Internal Computer** button on the Control Panel.

### To switch to a guest computer

Press the **Guest Laptop** button on the Control Panel (with the optional Guest Laptop Support kit).

### To launch Notebook software

Press the **Notebook Software** button on the Control Panel.

**NOTE:** For Notebook software to appear, SMART Board software must first be installed and running on the internal computer (page 25). The internal computer must also be the active source. For information on using Notebook software, see *Using Notebook Software* on page 34.

### To open Floating Tools

Press the **Notebook Software** button on the Control Panel and hold for three seconds.

OR

Press the **SMART Board** icon in the system tray (Windows computers) or in the Dock (Macintosh computers), and select **Floating Tools**.

**NOTE:** Before the Floating Tools can appear, SMART Board software must first be installed and running on the internal computer (page 25). The internal computer source must also be the active source. For more information on using the Floating Tools, see *Using the Floating Tools* on page 35.

## Using the SMART Board Interactive Whiteboard

Touch control is enabled when you've connected your computer to the 3000i and installed SMART Board software. However, to get the most from your 3000i, open the SMART Board tools. You'll know that the tools are active if you can see the **SMART Board** icon in the system tray (Windows computers) or in the Dock (Macintosh computers). SMART Board software lets you customize the pen tray tools. This includes changing the eraser size and the color and transparency of the pen tools. To do this, read the applicable Help topic, which you can access in the *SMART Board Control Panel* by pressing the **Help** button.

### SMART Board Tools

Use the SMART Board tools for all the SMART Board features beyond basic touch control and pen tray button use. These features include annotation and tool-configuration capabilities, video player, recorder and the on-screen keyboard.

**NOTE:** The SMART Board tools must be running before you can use the pen tray pens and eraser. If you want to write on your interactive whiteboard with a pen tray pen, make sure the

**SMART Board** icon appears in the system tray (Windows operating system) or Dock (Macintosh computer).

To summarize, the SMART Board tools include:

- Notebook software, an application for organizing and sharing your annotations
- Recorder, an application for recording a video file of everything you do on a computer
- Video Player, a Windows-only application for annotating over video and graphics
- Keyboard, a virtual keyboard for entering text in an application
- the Floating Tools, a virtual palette of annotation tools
- the SMART Board Control Panel, a utility that lets you configure the interactive whiteboard, including the pen tray tools

## SMART Notebook software

Notebook software lets you create a variety of annotations and import graphics, text, clip art and entire files from any other application. But Notebook software is much more than just an electronic flip chart for displaying presentations or capturing notes in a brainstorming session. It can also capture anything you write on the interactive whiteboard *over any application*.

If you want to capture what you've written with a pen tray pen over another program, just select **Screen Capture Toolbar** from the **View** menu and then minimize the Notebook software window. A three-button Screen Capture toolbar floats on top of all your applications. You can now capture your annotation with a press of a button: the captured image is automatically placed on a new page of the Notebook file. Macintosh computer users can access the same annotation-capture capability from the **SMART Board Tools** menu.

To write into Notebook software, leave the Notebook window open and maximized. If you want an even larger area for writing or brainstorming, select **Full Screen** from the **View** menu.

## Using the Floating Tools

The Floating Tools are a virtual version of the pen tray tools. Press the **Pen** button, for example, and the next time you touch and drag on the screen, you'll produce a line of digital ink. The Floating Tools also include a number of tools that you won't find in your pen tray, such as tools for displaying a large pointer, producing a spotlight, capturing your annotations and restoring cleared annotations. You can customize and save your palette in a user profile that you can activate each time you use the interactive whiteboard.

# Maintenance and Troubleshooting

## Cleaning the Screen and other Components

Clean the screen surface regularly so dust buildup doesn't disrupt the operation of the 3000i.

*Do not* spray glass cleaner directly onto the screen surface. Instead, spray it lightly on a cloth and then gently wipe. The 3000i uses digital cameras that are located inside the frame. If excess glass cleaner flows into the crack between the frame and the writing surface, the fluid could damage the cameras.

Before you clean the screen, log off the computer. If you touch the screen when the computer is in any other state (for example, with a program open or at the desktop), you may activate program components or scramble desktop icons. After you log off, put the projector into standby mode so you can easily see dirt and streaks.

Remove marks made with a permanent marker by completely covering them with the ink from a dry-erase marker (*not* a low-odor marker). Then wipe with a soft cloth. Dry-erase ink contains solvents that remove permanent ink. If any trace of the original permanent ink remains, spray the area with standard glass or whiteboard cleaner and wipe clean.

The back of the screen is well protected from handling by its location on the inside of the unit. However, if it must be dusted, or if a mark has been made on its surface, dab it gently with a soft cloth that's been sprayed with standard, alcohol-free glass cleaner. Do not apply the cleaner directly to the surface.

**CAUTION**

Do not, under any circumstances, apply isopropyl alcohol, water or acetone to the rear surface of the interactive screen. Any of these fluids could damage the diffusion coating, resulting in a permanent deterioration in display quality.

Periodically dust the mirrors and unit components using a soft cloth. To clean the mirrors, use a standard, alcohol-free glass cleaner.

## Cleaning the Projector

Before you clean the projector, turn it off, wait at least one minute and then unplug it.

Periodically clean the projector casing with a damp cloth. If it is heavily soiled you can use a mild detergent, but don't use strong detergent or a solvent, such as alcohol or thinner. Use a blower or lens paper to clean the lens, being careful not to scratch or mar the lens.

### Cleaning the filter and clearing the filter-cleaning message

Clean the air-filter sponge with a vacuum after every 100 hours of operation (more often in dusty conditions), as described on page 51 of the *NEC VT470/570/670 User's Manual*.

A "Please Clean Filter" message from the projector will appear on the bottom of the screen after every 100 hours of operation. However, after cleaning the filter this message will not automatically disappear, so you must use the projector remote control to clear the filter usage meter, as follows:

1. Press the **Menu** button on the projector remote control.

2. Select **Default > Clear Filter Usage**.

The meter returns to zero. You won't receive another "Please Clean Filter" message for another 100 hours.

## Replacing the Projector Lamp and Filter

Even though the lamp may still be working, you should replace your projector lamp after 2,000 hours of normal mode operation or 3,000 hours of eco mode operation to maintain optimal performance. You should also replace the air filter with the new one that you'll receive with the replacement lamp.

Order the standard lamp from NEC. Alternatively, you can order the same lamp from your SMART dealer. Ask for SMART P/N 01-00161. Do *not* use any other lamps.

**NOTES**

- The projector will turn off and go into standby mode after 2,100 hours (3,100 hours in eco mode). If this happens, you should replace the lamp immediately.
- You should always replace the lamp when you see this message: "The lamp has reached the end of its usable life. Please replace the lamp."

To find out how many hours of lamp use remain, go to the projector menu (press the **Menu** button on the remote control or projector) and select **Information > Page 1 > Remaining Lamp Time**. Replacing the used lamp with a new lamp automatically clears the lamp usage hours.

To replace the lamp and filters, complete the following procedures.

1. Remove the projector from the cabinet, following the instructions on page 51.
2. Replace the lamp, following the instructions on page 53 of the *NEC VT470/570/670 User's Manual.*
3. Return the projector to the cabinet by performing the steps on page 55.
4. Reset the lamp hour meter as described on page 50 of the *NEC VT470/570/670 User's Manual.*

**WARNING**

After you turn off the projector, wait at least one minute before you unplug it. *Do not* touch or replace the projector lamp (which will be very hot) for at least an hour.

Après avoir éteint le projecteur, attendez au moins une minute avant de le débrancher. Attendez *au moins une heure* avant de toucher ou de remplacer la lampe du projecteur (qui sera très chaude).

Stecken Sie den Projektor für mindestens eine Minute nach dem Abschalten nicht aus. Berühren oder ersetzen Sie die Projektorlampe (die sehr heiß sein wird) *nicht* vor Ablauf einer Stunde.

プロジェクターの電源を切った後、最低でも 1 分間はプロジェクターのプラグを抜かないでください。プロジェクターのランプは非常に熱くなりますので、最低でも 1 時間は触ったり交換したりしないでください。

**CAUTION**

*Never touch the back of the screen or brush against it with your head while you're examining internal unit components.* If you do smudge this surface, lightly spray alcohol-free glass cleaner onto a soft cloth and dab the affected area to remove the marks. Never apply isopropyl alcohol, water or acetone, as these fluids will damage the diffusion coating and permanently reduce the display quality.

**WARNING**

To avoid an electric shock, do not remove any screws except the two lamp-case screws.

Pour éviter tout risque de choc électrique, ne retirez aucune vis, à l'exception des deux vis d'accès aux lampes.

Para evitar descargas eléctricas, no quite ningún tornillo excepto los de las dos lámparas.

Um einen elektrischen Schlag zu vermeiden, dürfen Sie mit Ausnahme der beiden Lampengehäuseschrauben keine Schrauben entfernen.

感電の恐れがありますので、ランプ ケースの 2
つのねじ以外に、ねじは取り外さないようにしてください。

## Troubleshooting

Most problems result from incorrect cabling, an incorrect computer setting or improperly installed or configured software. The 3000i works properly only when its major components are functioning correctly. These components include the computer, projector and the interactive screen. To determine if they're functioning properly, refer to the LEDs on the 3000i and the tables in this section.

For information about the normal behavior of the LEDs in the Control Panel and what they tell you about the status of the projector lamp, see the table on page 6.

As you begin troubleshooting, record the problems that you observe and what you did to resolve them. These notes will help if you need to contact SMART Technical Support (page 43). Also try these general tips:

- Substitute hardware that you know is functioning with any hardware that you suspect may be malfunctioning. For example, substitute the computer with another that you know is working properly.
- Check all cable connections and system settings. Check the LEDs for the presence of power or for the indication of a display problem.
- Completely shut down the system and then restart it. First, shut down the computer. Then press the **Lamp Off** button on the Control Panel to turn off the projector lamp. Allow it to cool for three minutes, and then disconnect the main AC power cable from the room outlet. To restore power to the 3000i, wait another 15 seconds and then plug the AC power back in. Then turn on the computer and projector.

The following table may help you resolve some of the more common 3000i problems.

| Problem | Cause | Possible Resolution |
|---|---|---|
| There's no touch control on the interactive screen | Software problem | Make sure SMART Board software is running. Is there a **SMART Board** icon in the System Tray or the Dock? If not, you'll need to start the program.<br>If SMART Board software is running, click the **SMART Board** icon in the system tray (Windows computers) or in the Dock (Macintosh computers), and select **Control Panel**. Now check the status of the interactive whiteboard. You may have to reestablish communications. |
| Touch control isn't accurate | Orientation problem | Orient the screen (page 26) |
| The pen tray tools and buttons aren't responding properly | Pen tray problem | Check that nothing is obscuring the sensors on the pen tray. Clean the sensor or remove any blockage. |
| There's no touch control or electronic ink | Power problem | Check that the main power cable is connected to a functioning room outlet<br>Call Technical Support (page 43) |
| No electronic ink appears on the interactive screen | Software problem | Make sure SMART Board software is running<br>Also, make sure SMART Board software is in Projected Mode. Press the **SMART Board** icon in the system tray (Windows computers) or in the Dock (Macintosh computers), select **Control Panel** and then make sure **Projected** is selected under **Mode**. |
| You see gaps in the electronic ink or specific areas of the screen are unresponsive to touch | Camera calibration problem | Calibrate the cameras (see below) |

## Calibrating the Cameras

Digital cameras in the corners of the interactive screen track objects like your finger or a pen tray pen. Each camera is calibrated to recognize the position of a pen tray tool or your finger on the screen's surface and to send this information to the SMART Board software. The software then interprets the information as mouse clicks or electronic ink in the appropriate location.

Here's how the system works. The cameras constantly scan the screen surface. When a camera detects a target, its processor identifies the affected pixel and calculates the angle at which it occurs. The cameras are all carefully calibrated before they leave the factory so that these angles will intersect.

If the cameras become misaligned for any reason, those angles will no longer intersect at all points, targets will not be detected, and you may experience “broken ink” (gaps in your writing) or an area of the screen that’s unresponsive to touch.

Fortunately, this problem is easily fixed by performing a simple calibration procedure, as described below.

### To calibrate the cameras

1. Press the **SMART Board** icon in the system tray (Windows computers) or in the Dock (Macintosh computers), and select **Control Panel**.
2. Press **SMART Board Settings**.
3. From the **Hardware Info & Settings** drop-down list, select **Advanced Settings**.

   The *Edit Advanced Board Settings* dialog appears.
4. In **DViT Settings**, press the **Calibrate** button.

   The four-point calibration screen appears.
5. Press the center of each target and hold until the target moves.

   After you press the final target, the orientation screen appears.
6. Complete the 4-point orientation.
7. Press **OK**.

# Customer Support

## Contacting SMART Technical Support

SMART's Technical Support team welcomes your call. However, you may first want to contact your local reseller if you experience any difficulty with your 3000i, as they may be able to solve the problem without delay.

All SMART products include free telephone, fax and e-mail support.

**Telephone:** 1.866.518.6791 (toll-free in Canada/U.S) or
+1.403.228.5940 (all other countries)
(Available 7 a.m. – 6 p.m. Mountain time from Monday to Friday)

**Fax:** +1.403.802.1256

**E-mail:** support@smarttech.com

**Web Site:** www.smarttech.com/support

When you phone Technical Support, it will be helpful if you have access to your 3000i during the call. The support representative may ask you for the following information:

- the serial number of the unit
- the version of the software that's causing the problem and the version of your computer's operating system (if applicable)

## General Inquiries

**Main Switchboard:** 1.888.42.SMART (toll-free in Canada/U.S.) or +1.403.245.0333 (all other countries)

**Fax:** +1.403.228.2500

**E-mail:** info@smarttech.com

**Address:** SMART Technologies Inc.
Suite 300, 1207 – 11th Avenue SW
Calgary, AB CANADA T3C 0M5

## Returning Defective Merchandise

Your *Rear Projection* SMART Board 3000i interactive whiteboard (including the integrated projector) is covered by a two-year limited equipment warranty. To return defective merchandise, call SMART Technical Support. You will receive the appropriate Return of Merchandise authorization and instructions for transporting your 3000i to an authorized service center.

### Warranty Shipping Charges

Transportation charges that are incurred from warranty service are paid as follows. You are responsible for transporting the system to the service center, and SMART pays return shipping via ground service on any product that's returned for service within the warranty period. If you request a rush order, any associated charges are billed to you. Read the warranty that was included with your 3000i for details.

**NOTE:** After the warranty period, you are responsible for transporting the product to and from the service center.

## Registration

A User Registration card was included with your 3000i. To help us serve you, fill in and mail this card to SMART Technologies Inc. or register online at www.smarttech.com/registration.

## Sending Feedback

You can help us improve our technical documentation by e-mailing your comments to TechnicalDocumentation@smarttech.com.

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- download PDF versions of our user guides, installation instructions and more
- read technical bulletins, FAQs and tips
- troubleshoot a problem
- explore our resource centers to learn about conferencing and room control systems

# Appendix A: Removing the Side Panel, Screen and Cabinet Top

Remove the side panel to access a number of important components such as the projector, SC8 controller and the Communications Hub.

**CAUTION**

*Never touch the back of the screen or brush against it with your head while you're examining internal cabinet components.* If you do smudge this surface, lightly spray alcohol-free glass cleaner on a soft cloth and dab the affected area to remove the marks. Never apply isopropyl alcohol, water or acetone, as these fluids will damage the diffusion coating and permanently reduce the display quality.

**NOTE:** Don't remove both side panels at the same time. If you do, the back panel will not be supported and will slide off.

Removing the right side panel (as you face the front of the cabinet) is also a preliminary step for removing the screen and the top of the cabinet.

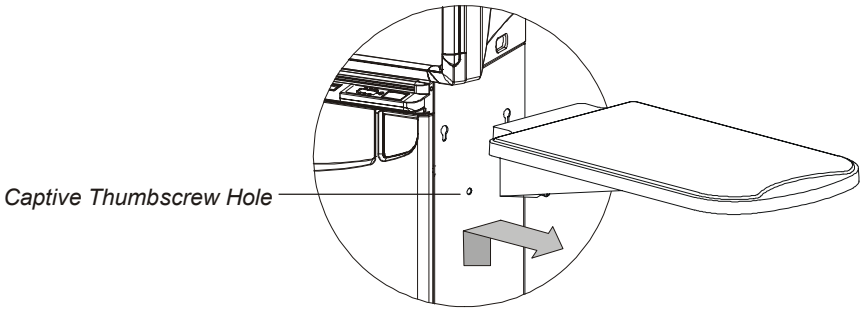
**NOTE:** You only need to remove the top of the cabinet if you need to move the cabinet through a low doorway, or if a cabinet component requires replacement or repair.

**CAUTION**

You'll need assistance with several of the steps in this procedure.

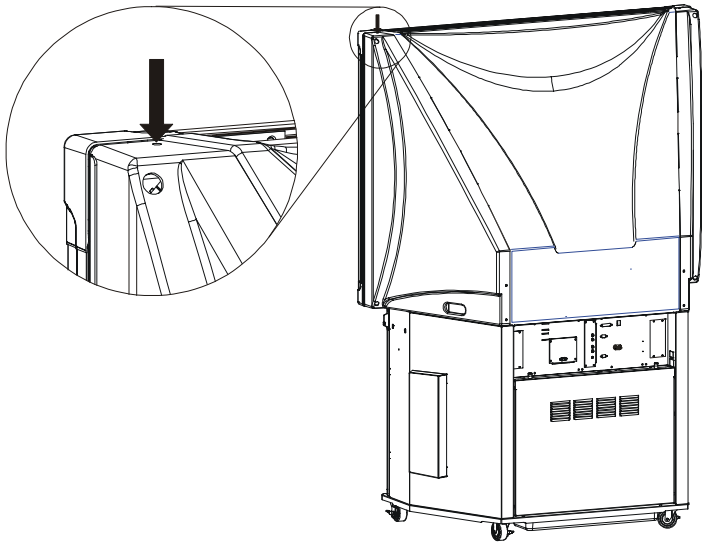
## To remove the right side panel

1. Detach the infrared (IR) receiver and leave it temporarily dangling.
2. If the optional guest laptop shelf is attached to the cabinet, loosen the captive thumbscrew underneath the shelf, lift the shelf up and pull it away from the cabinet.

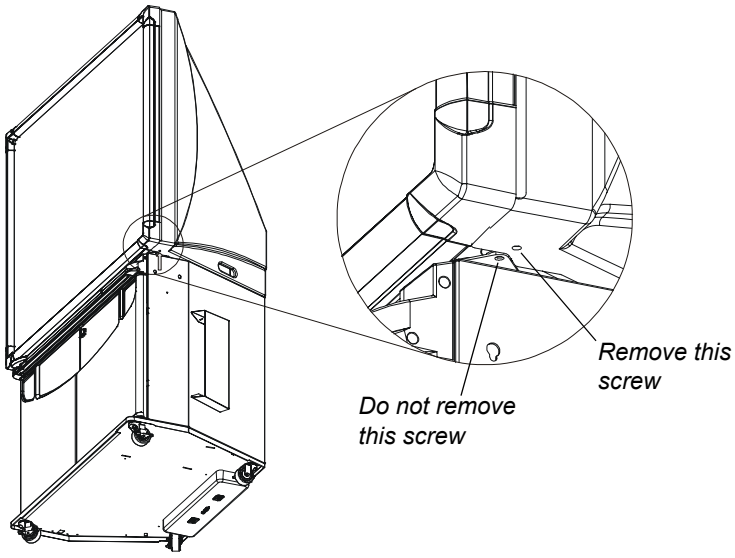



***Removing Guest Laptop Shelf***

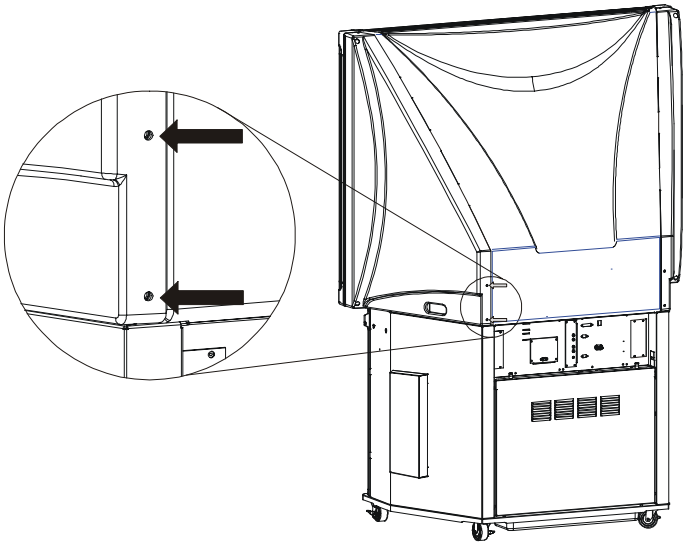
3. On the left side of the cabinet (as you face the rear), use the provided 5/32" hex key (located in the accessory kit) to remove the hex screw on the top corner of the interactive whiteboard.



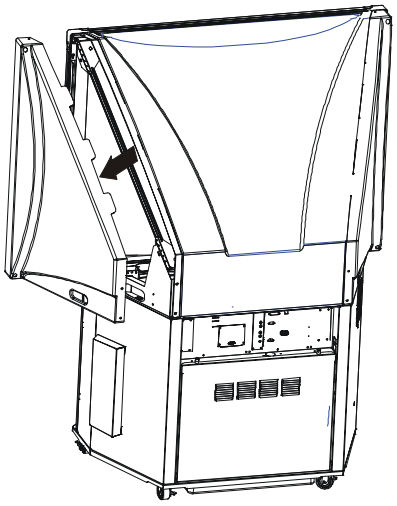
4. Using the same hex key, remove the hex screw underneath the bottom corner of the interactive whiteboard. Be careful to remove the hex screw shown in the following figure, as there is another safety hex screw closer to the inside corner, which you should not remove at this time.



5. Remove the two hex screws on the rear of the cabinet.



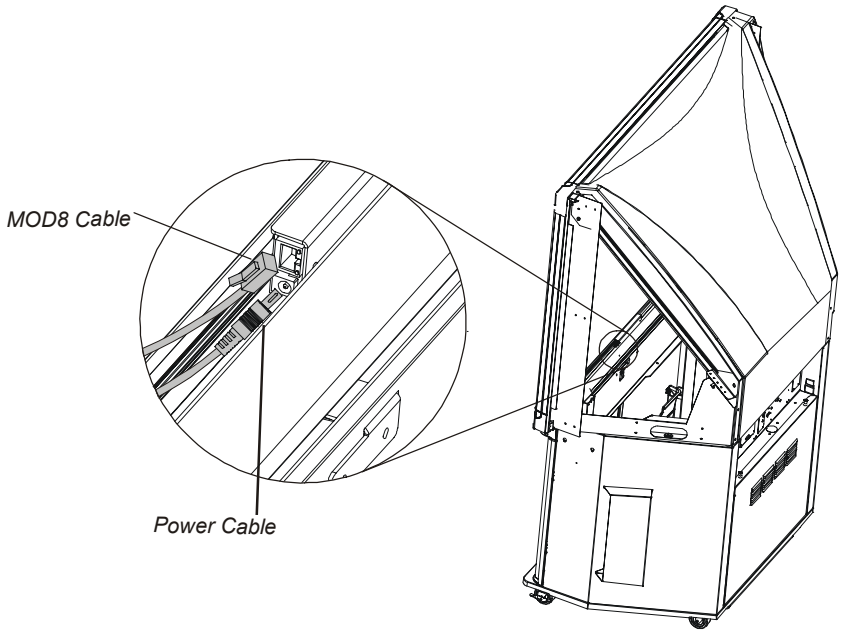
6. Grip the side handle and the top of the cabinet and pull the side panel off.



**NOTE:** To remove the screen, continue with the remaining numbered steps.

## To remove the screen (continued from previous procedure)

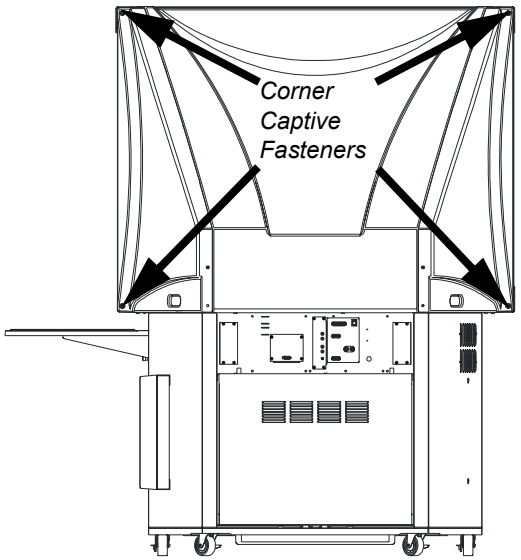
1. Reach inside the cabinet to disconnect the MOD8 and power cables at the bottom of the screen. Don't touch the back of the screen.




***Disconnecting MOD8 and Power Cables***

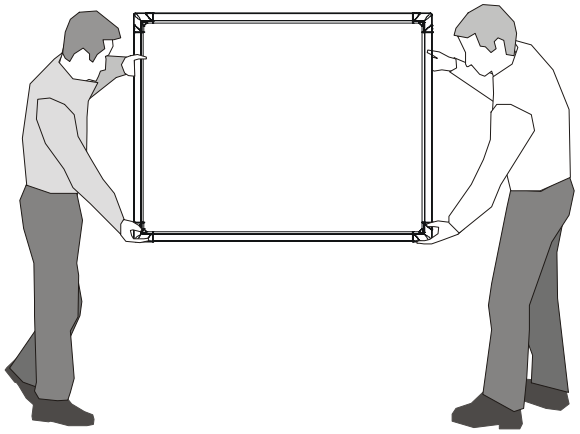
2. Loosen the four captive fasteners on the back corners of the interactive whiteboard using a Phillips® No. 2 screwdriver. Start with the two bottom fasteners; then loosen the two at the top (you may require a step stool to reach these fasteners).

   **NOTE:** Maintain constant pressure on the screwdriver to avoid damaging the screw heads.




   **NOTE:** Even after you completely loosen the captive fasteners, the screen remains suspended on two keyhole slots near the top of the cabinet.

3. With one person on each side, grasp the screen by the top and bottom corners. Lift the screen up and then out to free it from the two keyhole slots that support it. Set the screen down in a safe location.



***Removing the Screen***

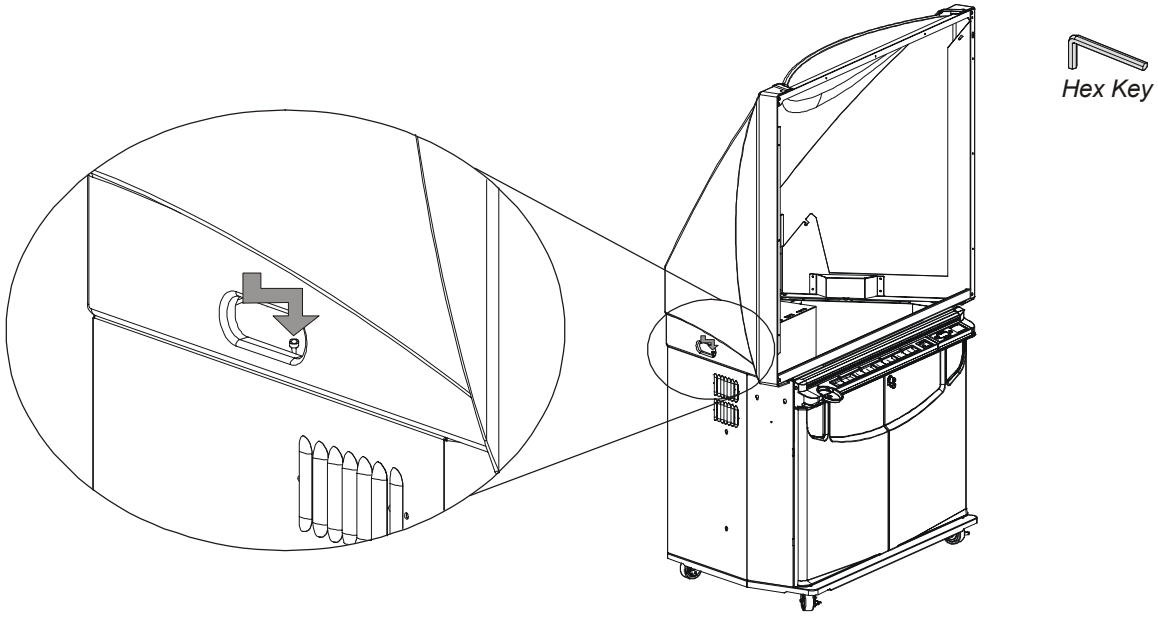
**CAUTION**

*Never touch the back of the screen or brush against it with your head.* If you do smudge this surface, lightly spray alcohol-free glass cleaner on a soft cloth and dab the affected area to remove the marks. Never apply isopropyl alcohol, water or acetone, as these fluids will damage the diffusion coating.

**NOTE:** To remove the top half of the cabinet, continue with the remaining numbered steps.

## To remove the top half of the cabinet (continued from previous procedure)

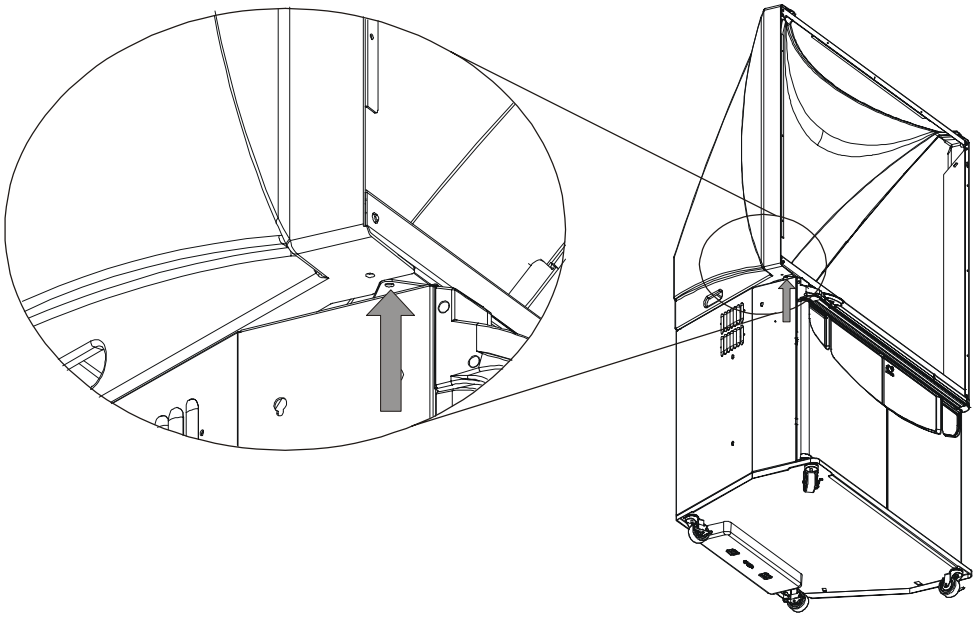
1. Using the provided 5/32" hex key, remove the safety screw that's located inside each side handle. With the screen removed, you'll find it easiest to reach inside the cabinet and remove the hex key through the hole above the handhold.



*Hex Key*

***Location of Side-Handle Safety Screw***

2. Using the same hex key, loosen and then remove the two safety screws located on the underside of the top half of the cabinet, on either side of the pen tray and Control Panel.



***Location of Underside Safety Screw***

3. With each person gripping a side handle with one hand and supporting the top of the cabinet with the other, carefully lift the top half of the cabinet off the base and then place it carefully on the floor.

# Appendix B: Removing and Replacing the Projector

To remove the projector (for example, to replace the lamp), you must remove the 3000i's left side panel and its rear access panel, disconnect the projector's cables and detach the projector from the projector plate.

This appendix also includes information on returning the projector to the 3000i.

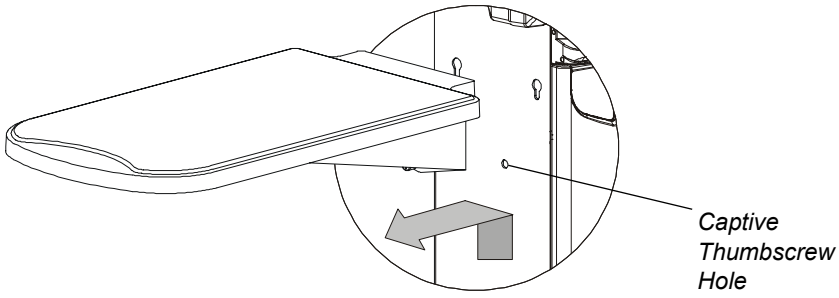
**CAUTION** *Never touch the back of the screen or brush against it with your head while you're examining internal unit components.* If you do smudge this surface, lightly spray alcohol-free glass cleaner onto a soft cloth and dab the affected area to remove the marks. Never apply isopropyl alcohol, water or acetone, as these fluids will damage the diffusion coating and permanently reduce the display quality.

## To remove the projector

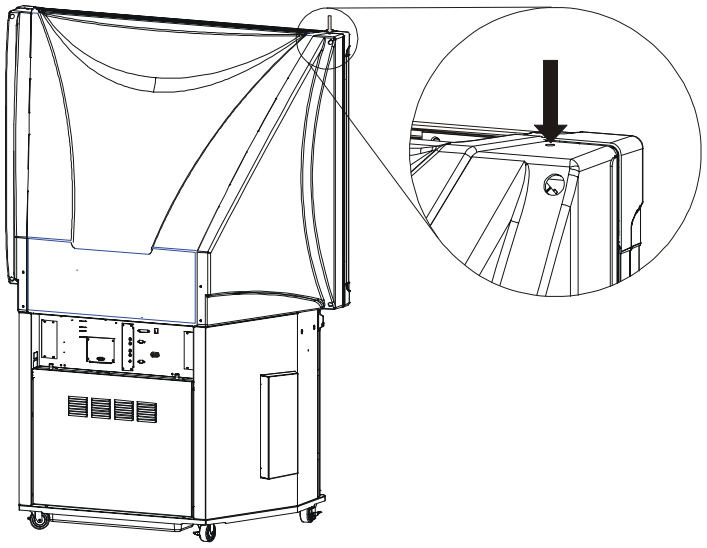
1. Turn off the projector (page 32) and shut down the computer.

   **CAUTION** After you turn off the projector, wait at least one minute before you unplug it.

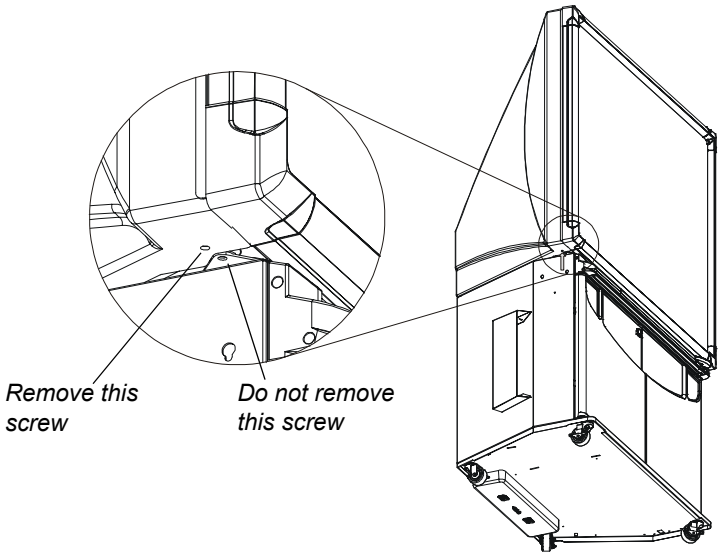
2. If the optional guest laptop shelf is attached to the left side of the cabinet (as you face the front), loosen the captive thumbscrew underneath the shelf, lift the shelf up and pull it away from the cabinet.



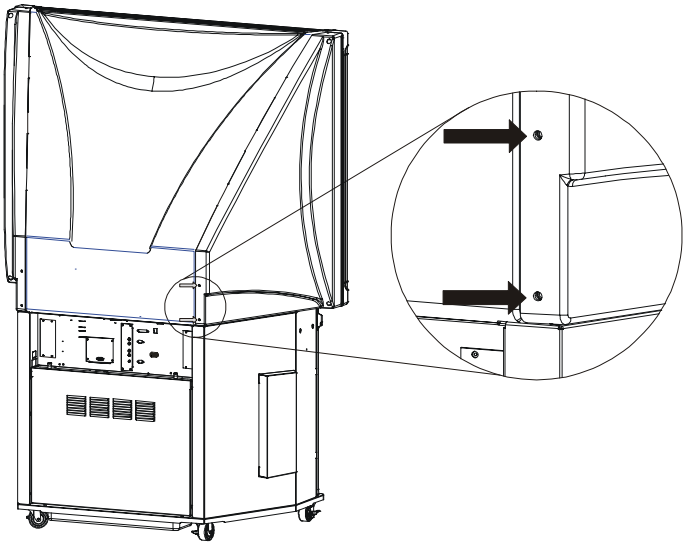
3. On the right side of the cabinet (as you face the rear), use the provided 5/32" hex key (located in the accessory kit) to remove the hex screw on the top corner of the interactive whiteboard.



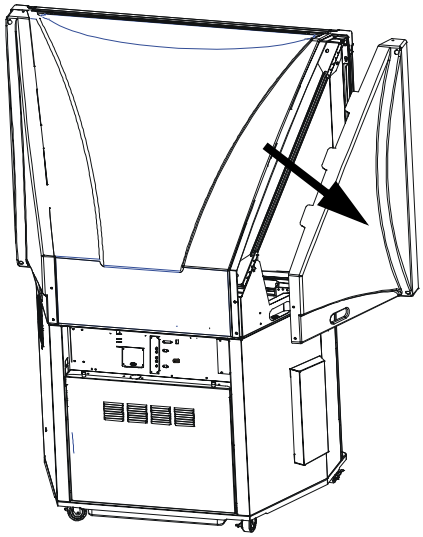
4. Using the same hex key, remove the hex screw underneath the bottom corner of the interactive whiteboard. Be careful to remove the hex screw shown in the following figure, as there is another safety hex screw closer to the inside corner, which you should not remove at this time.



5. Remove the two hex screws on the rear of the cabinet.



6. Grip the side handle and the top of the cabinet and pull the side panel off. Put the side panel in a safe place.

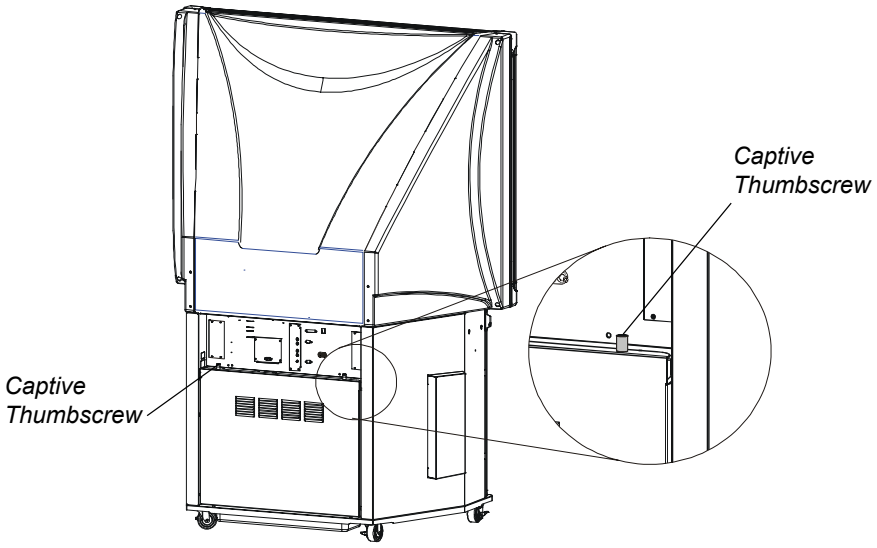


7. Reach inside the cabinet and unfasten the two projector straps.

**CAUTION**

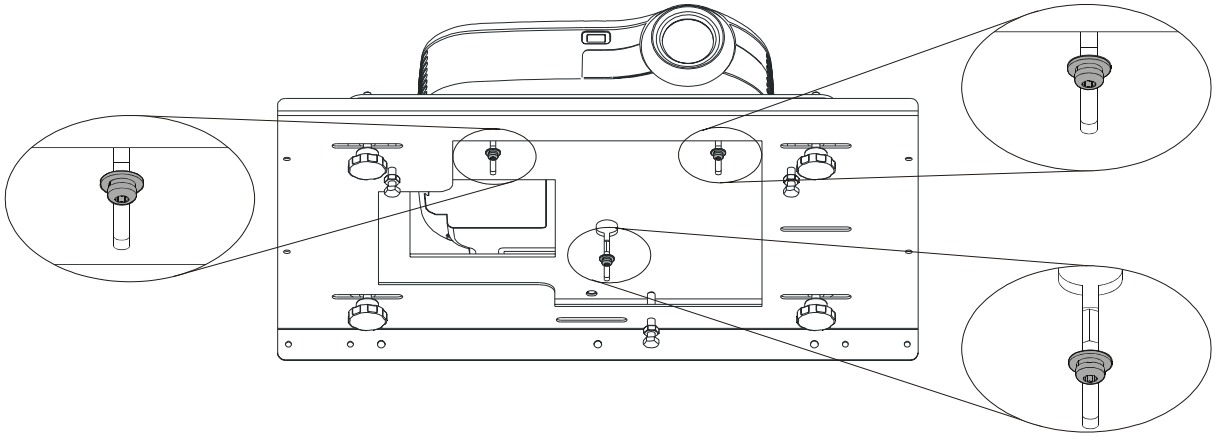
*Never touch the back of the screen or brush against it with your head while you're examining internal unit components.* If you do smudge this surface, lightly spray alcohol-free glass cleaner onto a soft cloth and dab the affected area to remove the marks. Never apply isopropyl alcohol, water or acetone, as these fluids will damage the diffusion coating and permanently reduce the display quality.

8. At the rear of the cabinet, loosen the two captive thumbscrews at the top of the rear access panel.



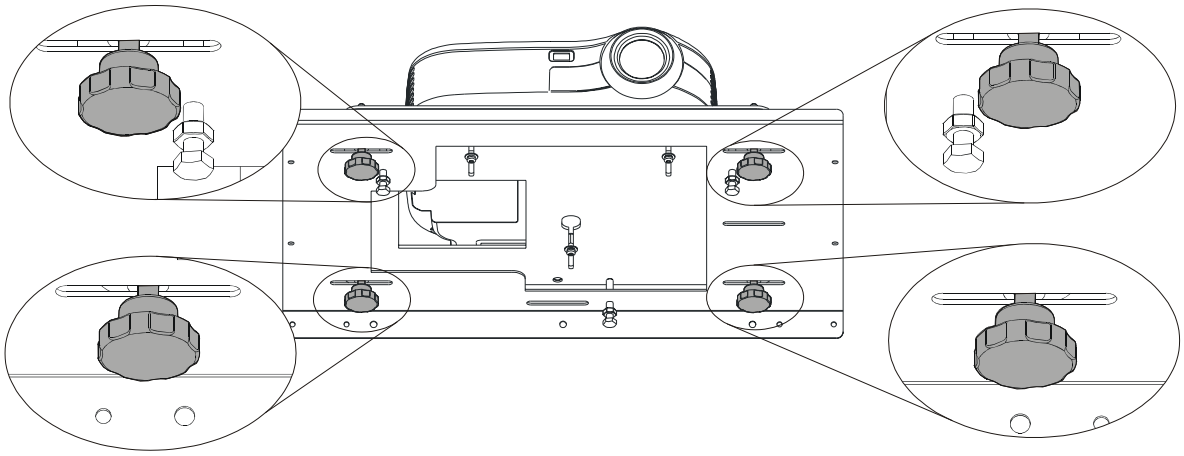

9. Rotate the top of the rear access panel toward you and then pull it upwards, releasing it from the cabinet. Put the rear access panel in a safe place.
10. Disconnect all of the cables from the projector, including the power cable.

    **NOTE:** The projector cables are labeled so that you can easily restore these connections.
11. Using a pencil, mark the projector plate with the current position of the three screws that attach the projector to the plate.



12. Loosen *but do not remove* these three screws using the TORX key in the accessory kit. Carefully allow the projector to slide backwards until it stops.

**NOTE:** Do not change the position of the four height adjustment knobs.



13. Reach into the cabinet through the side panel, slide the projector forward, lift it off the plate and remove it from the cabinet.

> **CAUTION** *Never touch the back of the screen or brush against it with your head while you're examining internal unit components.* If you do smudge this surface, lightly spray alcohol-free glass cleaner onto a soft cloth and dab the affected area to remove the marks. Never apply isopropyl alcohol, water or acetone, as these fluids will damage the diffusion coating and permanently reduce the display quality.

14. Set the projector on a flat surface.

    **NOTE:** If you have removed the projector in order to replace the lamp, follow the instructions on page 53 of the *NEC VT470/570/670 User's Manual.*

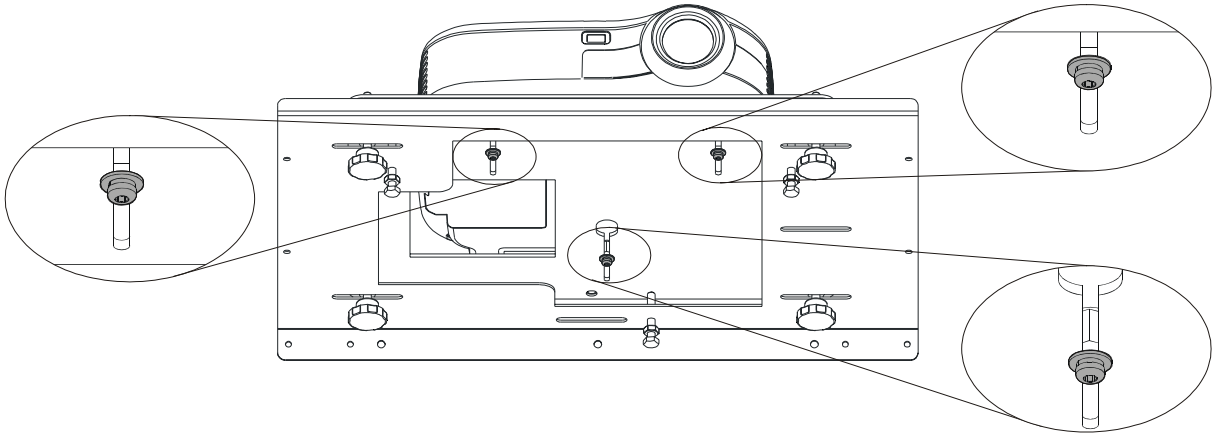
> **WARNING** *Do not* touch or replace the projector lamp (which will be very hot) for at least an hour after turning off the 3000i.

## To replace the projector

1. Lift the projector into the cabinet through the side panel. Lower it onto the projector plate so that the screws go through the keyhole slots. Then carefully allow the projector to slide backwards until it comes to a halt.

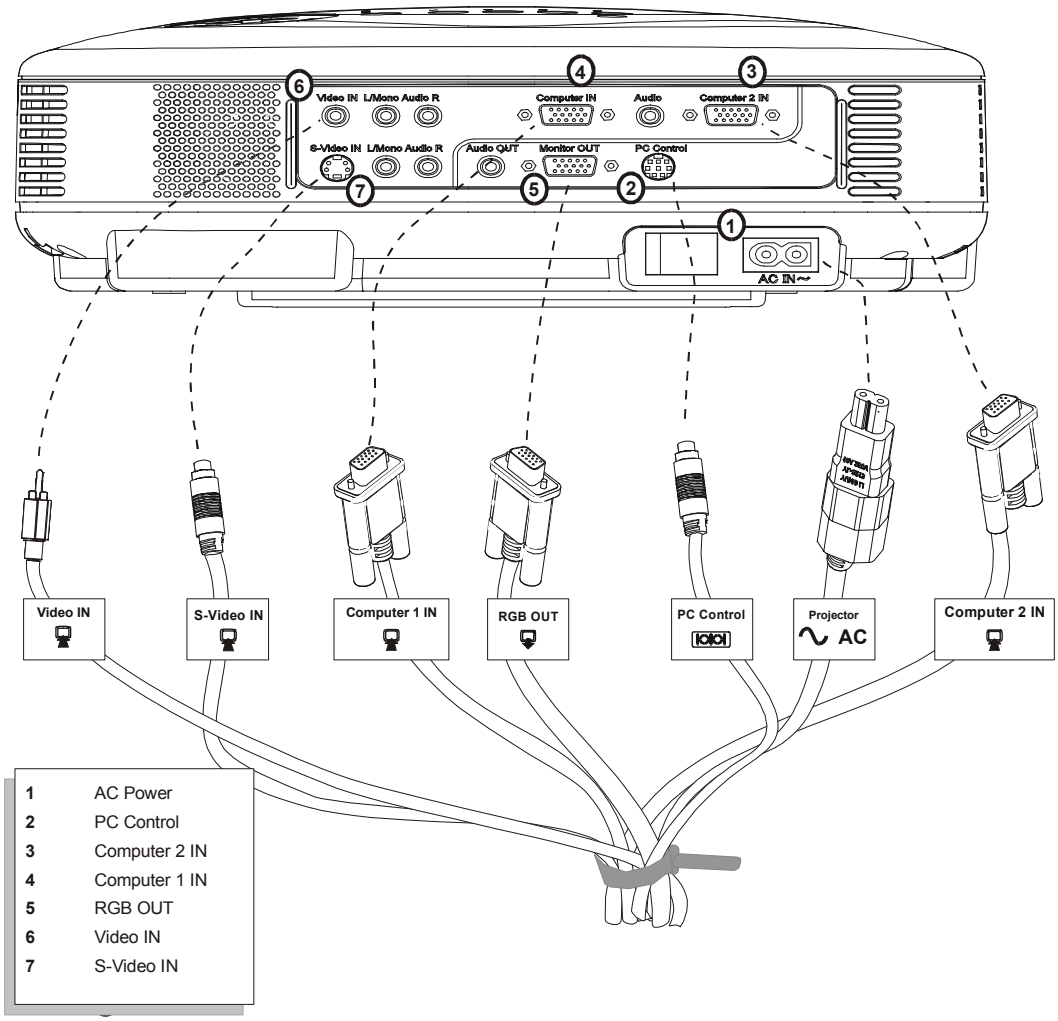
> **CAUTION** *Never touch the back of the screen or brush against it with your head while you're examining internal unit components.* If you do smudge this surface, lightly spray alcohol-free glass cleaner onto a soft cloth and dab the affected area to remove the marks. Never apply isopropyl alcohol, water or acetone, as these fluids will damage the diffusion coating and permanently reduce the display quality.

2. From the rear of the cabinet, slide the projector forward until the three screws are in the three marked positions. You made these marks on the projector plate before you removed the projector. Tighten the three screws using the TORX key in the accessory kit.

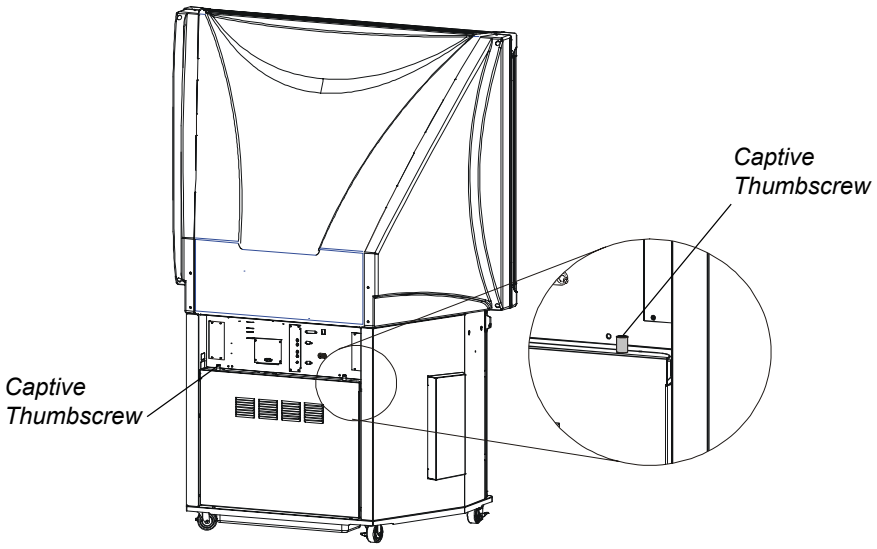


3. Connect all of the projector cables.

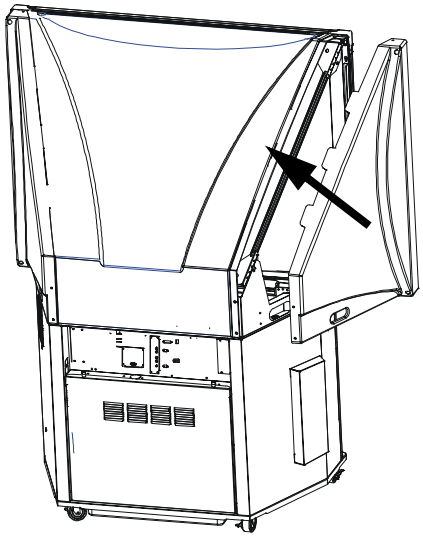
   **NOTE:** The projector cables are labeled, so you can easily restore these connections.



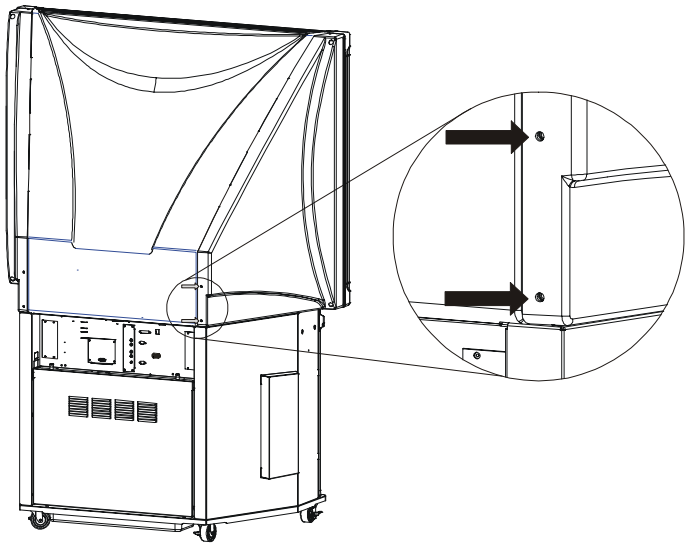
4. Fasten the two projector straps.
5. Reattach the rear access panel to the rear of the cabinet. Tighten the two thumbscrews at the top of the rear access panel.



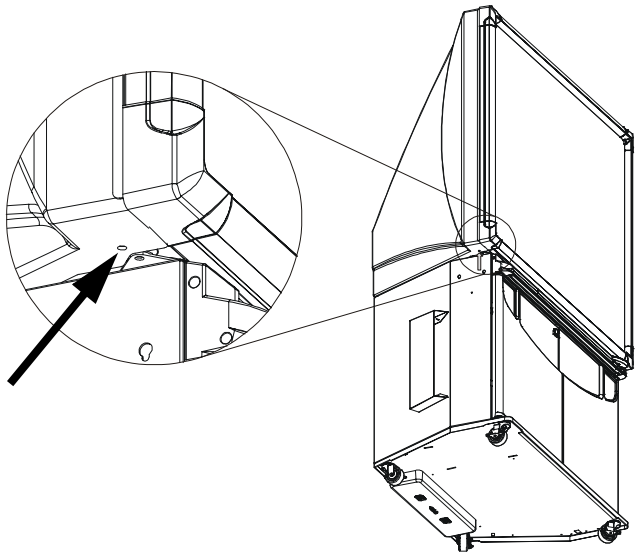

6. Reattach the side panel to the side of the cabinet.



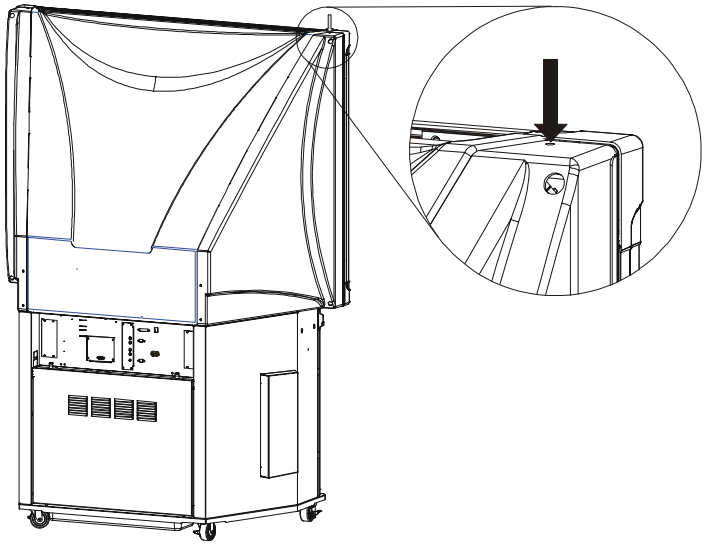
7. Attach and then tighten the two hex screws on the rear of the cabinet using the provided 5/32" hex key.



8. Attach and then tighten the hex screw underneath the bottom corner of the interactive whiteboard using the same hex key.



9. Attach and then tighten the hex screw on the top corner of the interactive whiteboard using the same hex key.



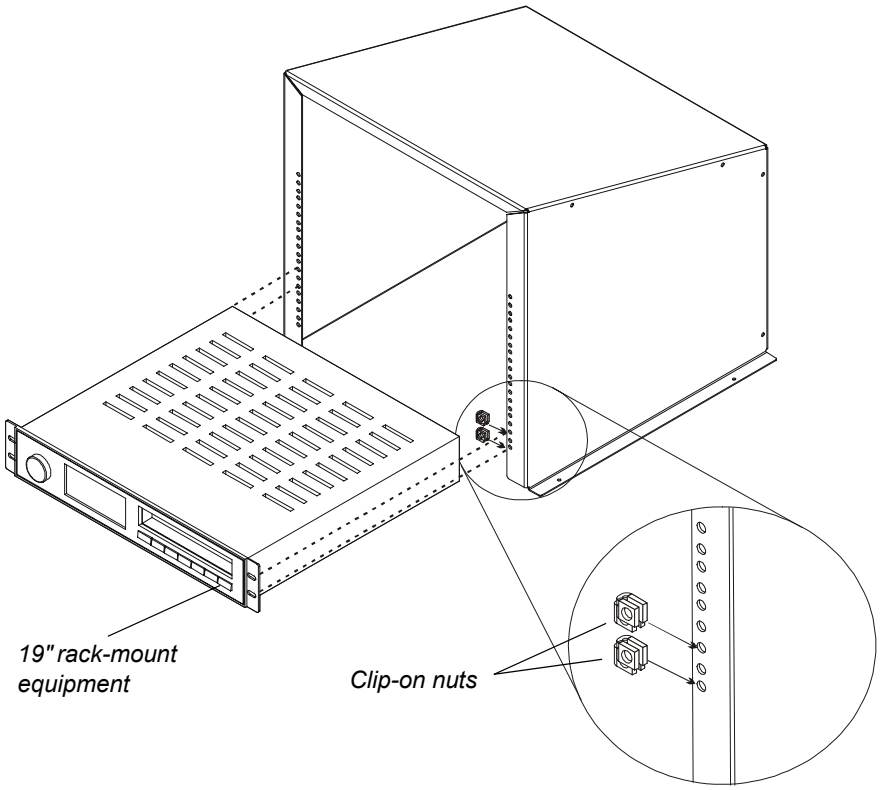
10. If you removed the guest laptop from the left side of the cabinet, reinstall it following the instructions on page 67.

# Appendix C: Connecting Rack-Mount Equipment to the Projector Platform

Use the provided clip-on nuts to secure the rack-mount equipment to the sides of the projector platform, just below the projector itself. The projector platform can accommodate rack-mount equipment with a width of 19" (48.3 cm).

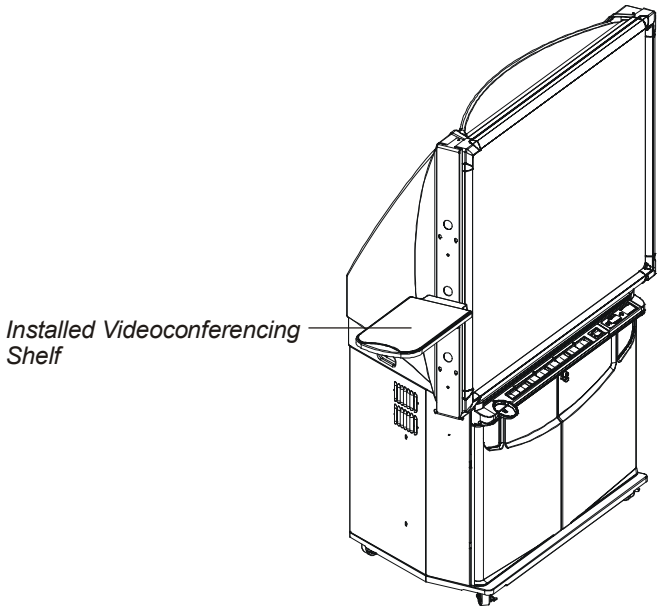
### To connect rack-mount equipment to the projector platform

1. Attach the provided clip-on nuts (located in the accessory kit) to the sides of the projector platform as required.
2. Connect your rack-mount equipment to the clip-on nuts using 10-32 × 1/2" fasteners (not provided).



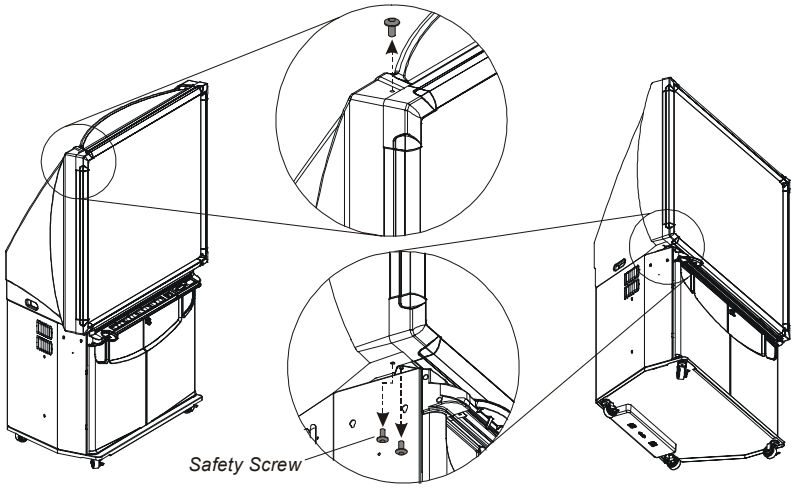
# Appendix D: Installing the Optional Videoconferencing Shelf

You can install the optional 3000i videoconferencing shelf on either side of the cabinet. The mounting arm of the shelf provides a convenient hidden channel for the camera cabling.




## To install the videoconferencing shelf

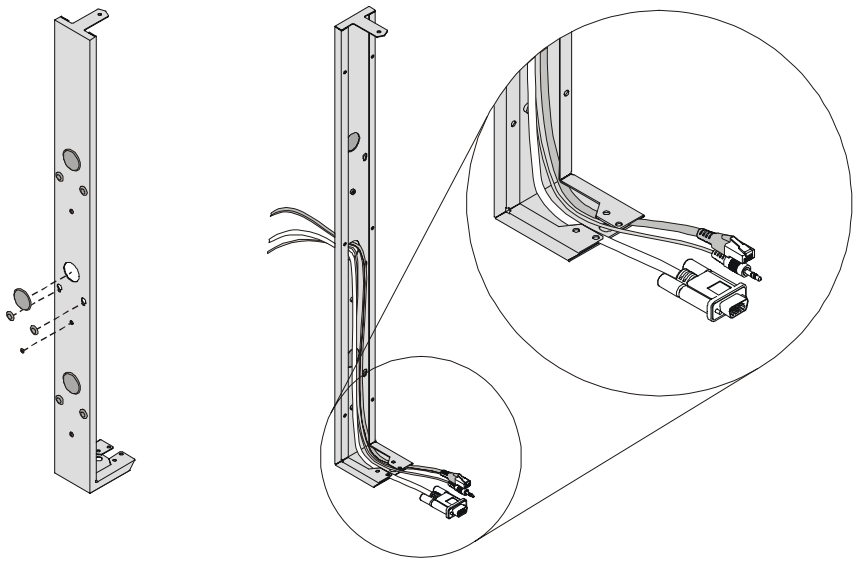
1. Choose the side on which you want to mount the shelf. Using the supplied hex key, remove the three 1/4-20 × 1/2" fasteners as shown. Note that one safety screw will be removed.




**WARNING**

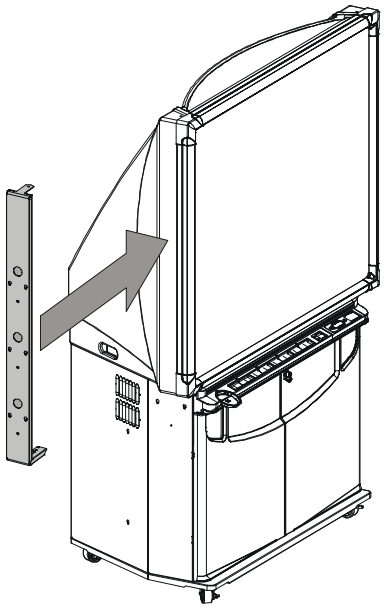
Do not move the cabinet until the safety screw is replaced in step 4.

2. Remove the four caps and plugs from the mounting arm at the location where you want to mount the shelf. Feed the cables for the videoconferencing camera through the large hole, down the channel and through the lower mounting point.

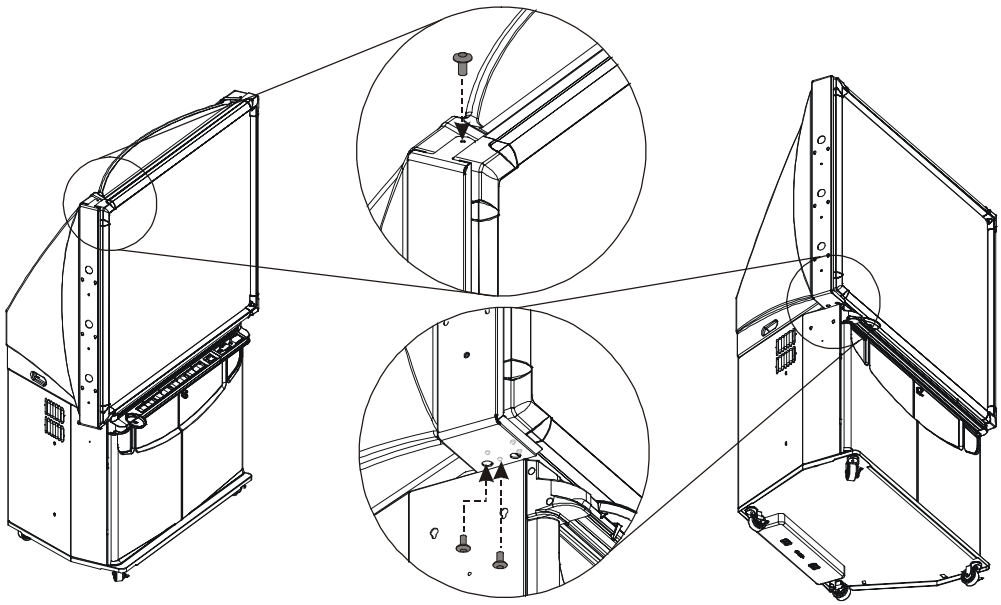


**NOTE:** The cables shown here may not match those required by your videoconferencing camera.

3. If you're installing the mounting arm on the same side as the IR receiver, detach the receiver and leave it temporarily dangling. Carefully slide the mounting arm onto the side of the cabinet, ensuring that the cables remain in the channel and are not pinched.

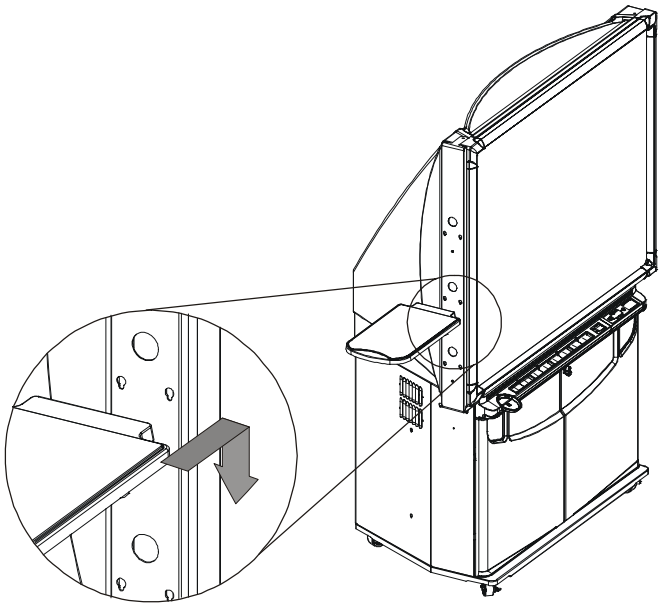


4. Use the three supplied 1/4-20 × 3/4" fasteners in place of the 1/4-20 × 1/2" fasteners (removed in step 1) to secure the mounting arm to the cabinet. The safety screw is now replaced.

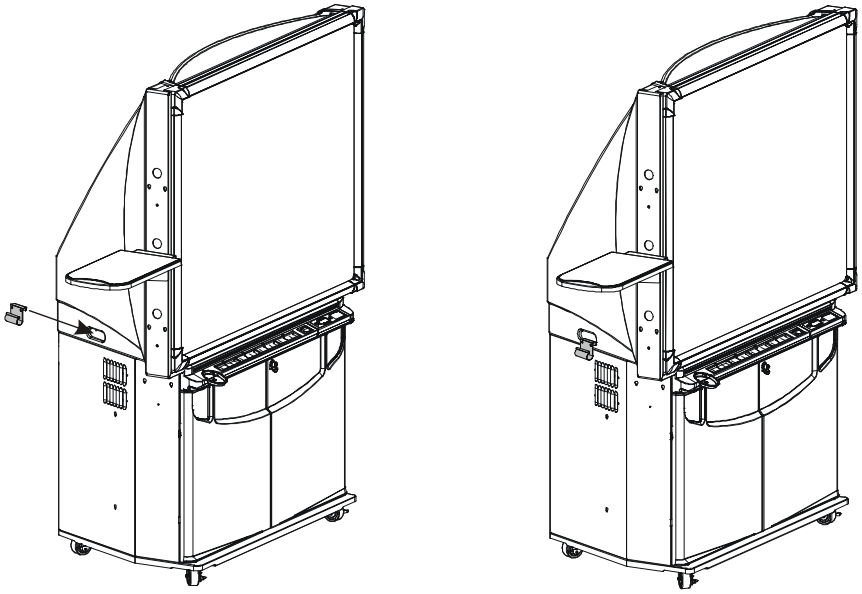


**NOTE:** Now that you've replaced the safety screw, you can safely move the cabinet.

5. Hook the shelf to the keyholes in the mounting arm and tighten the thumbscrew to secure the shelf.



6. Use the J-hook to manage the cables along the side of the cabinet. Clip the J-hook onto the handle on the side of the 3000i and route the cables through that hook to the Connection Panel at the rear of the cabinet.



7. If you detached the IR receiver in step 3, use the hook-and-loop fastener included in the accessory kit to reattach it to the bottom of the mounting arm.

   Installation is complete. Follow the instructions in reverse order to uninstall.

# Appendix E: Connecting a Guest Laptop

The ability to connect to a guest laptop is only available if the optional Guest Laptop Support kit has been installed with the 3000i. This kit connects your laptop to a multimedia switch inside the 3000i called an X-Port 20. Once your laptop is connected in this manner, you can switch the source of the 3000i's data input between the 3000i's internal computer and the guest laptop.

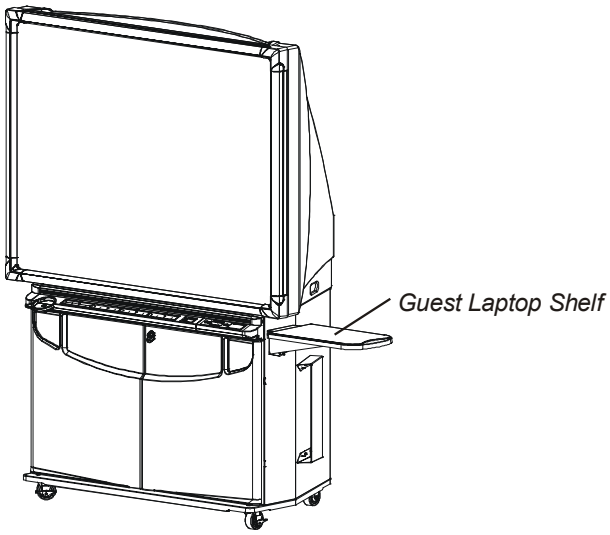
The Guest Laptop Support kit includes a laptop umbilical (which connects the 3000i to the guest laptop), a country-specific AC adapter or cable, and a guest laptop shelf.

The shelf is specifically designed to support a guest laptop, although it can be used to support a VCR or DVD player. You can mount this shelf on either side of the cabinet (see below).

## Installing the Guest Laptop Shelf

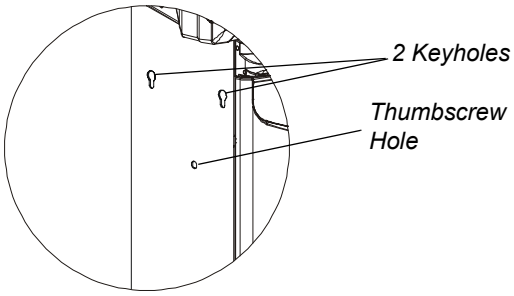
You can install the shelf on either side of the cabinet.

**NOTE:** If you're installing the shelf on the computer side of the cabinet, install the shelf before the computer. The plastic hole covers are much easier to remove when the computer is not inside.

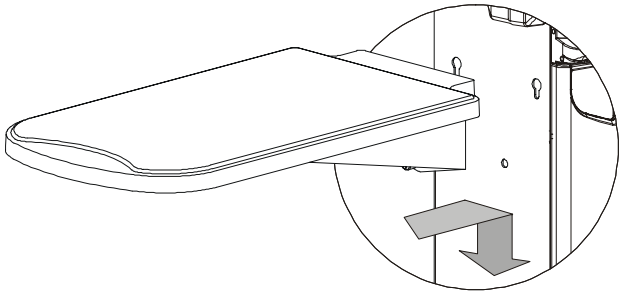


## To install the guest laptop shelf

1. Locate the two laptop shelf keyholes and the single thumbscrew hole on the upper right (or left) side of the cabinet. Remove the plastic hole covers.




2. Push the two protruding bolts on the edge of the shelf into the two keyholes, and then push the shelf firmly down.



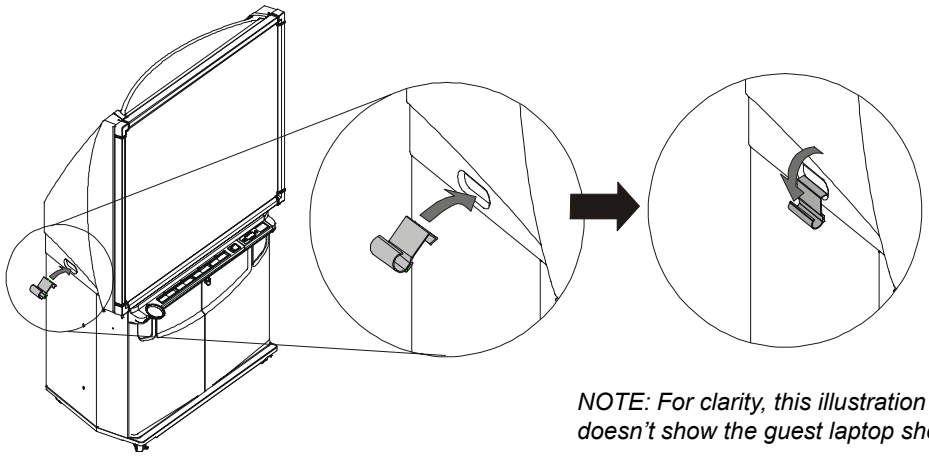
3. Push the captive thumbscrew at the bottom of the shelf into the thumbscrew hole and tighten.

## Installing the J-hook

You can attach the J-hook to the handle recess so you can route the umbilical cables through this hook to the guest laptop shelf. You'll find this hook in the accessory kit.

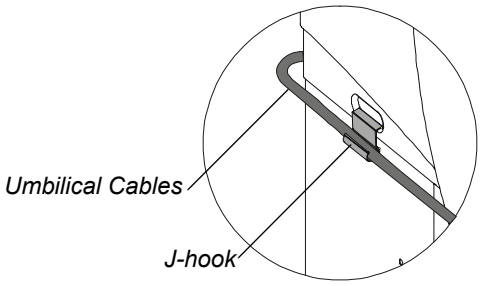
### To attach the J-hook

1. Insert the J-hook into the handle recess that's on the same side of the cabinet as the guest laptop shelf, and flip it into place.



*NOTE: For clarity, this illustration doesn't show the guest laptop shelf.*

2. Route the laptop umbilical cables through the hook.

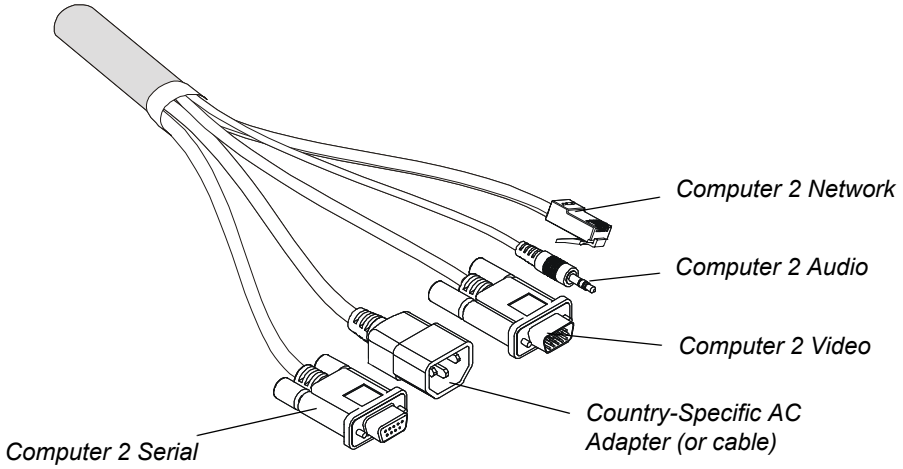


## Connecting the Laptop Umbilical to the 3000i Cabinet

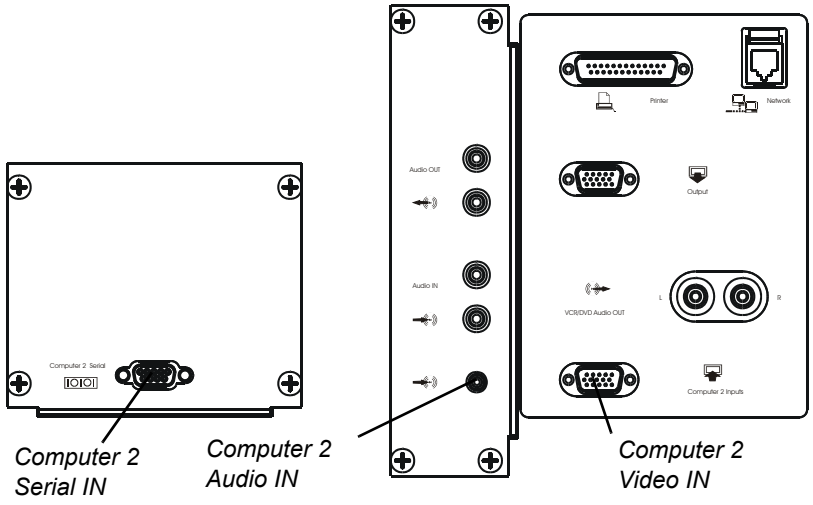
To attach the laptop umbilical to the cabinet, use the following instructions.

### To connect the laptop umbilical to the 3000i cabinet

1. Connect the serial end of the laptop umbilical's **Serial/USB** adapter to the **Computer 2 Serial IN** connector on the Connection Panel at the rear of the cabinet.

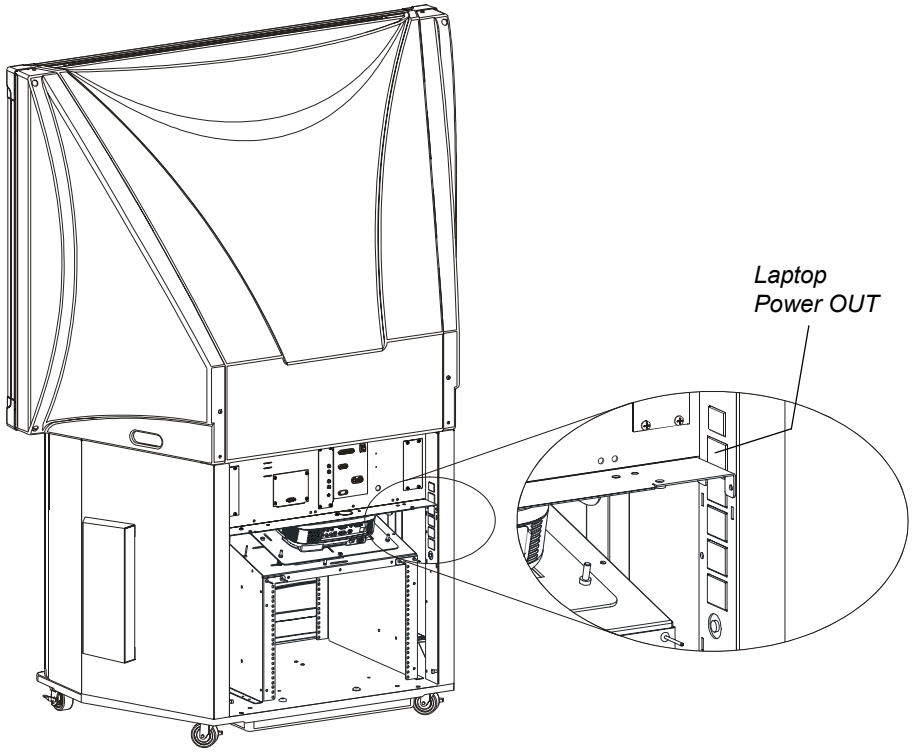



2. Connect the laptop umbilical's **Computer 2 Video** cable to the **Computer 2 Video IN** (female) connector on the Connection Panel.
3. Connect the laptop umbilical's **Computer 2 Audio** cable to the **Computer 2 Audio IN** connector on the Connection Panel.
4. Connect the laptop umbilical's **Computer 2 Network** adapter to a room network outlet.




***Connection Panel***

5. Connect the **AC Power** cable from the laptop umbilical to the **Laptop Power OUT**, located just below and to the right of the Connection Panel.

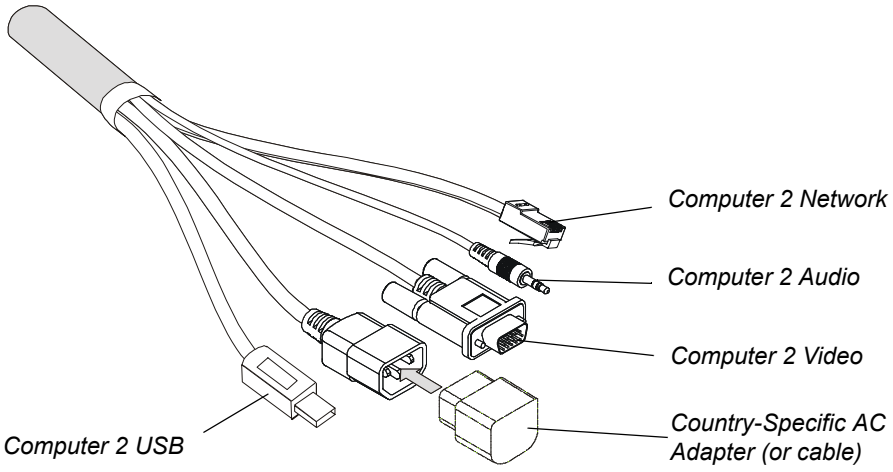



## Connecting the Laptop Umbilical to a Guest Laptop

To connect the 3000i to the guest laptop, use the laptop umbilical that you have already connected to the cabinet.

### To connect the laptop umbilical to a guest laptop

1. Extend the laptop end of the umbilical from the rear of the 3000i cabinet until it reaches the laptop shelf.




2. Connect the country-specific power adapter to the end of the AC power cable.

3. Connect the five cables that make up the laptop end of the umbilical—the **Computer 2 Network**, **Computer 2 Audio**, **Computer 2 Video**, **Computer 2 USB** and **AC Power** cables—to the appropriate connectors on the guest laptop.

   If the guest laptop is already turned on, the desktop image will appear on the 3000i screen.

4. If the laptop is off, turn it on.

5. Press the **Guest Laptop** button on the Control Panel to switch to the guest-laptop video source.

   The initialization screen appears on the 3000i screen.

   – If the initialization screen does not appear on the interactive whiteboard:

     Try activating the external video port on your laptop computer. Some laptop computers can't display their internal screens and activate the external video at the same time. You may need to deactivate the internal video port on your laptop or put the internal and external video ports into simultaneous display mode before the laptop displays on both the laptop monitor and the interactive whiteboard.

     With newer laptops, you can synchronize the internal and external video ports at the software level as follows.

     From the **Start** menu, select **Settings > Control Panel > Display**. Select the **Refresh** (or **Monitor Refresh**) tab. Press the **CRT/Panel** option to activate simultaneous monitor and external video port display

     This may not be possible with older laptop models, so you may need to switch back and forth between the internal and external video port. If you aren't sure which commands or keyboard combinations are required to do this, check the laptop owner's manual.

     You can now display any data stored on the laptop or external computer.

   – If the image on the screen is too large or too small:

     The projector and external computer resolution may not match. To adjust your computer resolution to match the projector resolution, press the **Start** button, and select **Settings > Control Panel > Display**. Press the **Settings** tab, and move the sliding bar in **Screen Area** to match the projector's resolution.

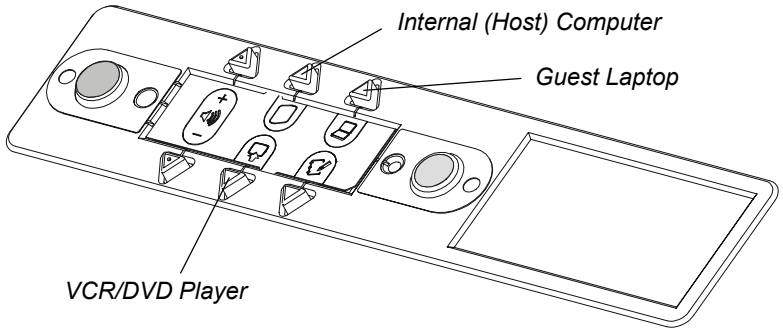
6. Install SMART Board software on the guest laptop. After installing the software, you should perform an orientation (page 26) to ensure that the pointer tracks your finger and the pen tray tools accurately.

## Changing the Display Source

You can change the video and audio input source for the internal projector using the source buttons on the Control Panel.

To switch to a guest computer, press the **Guest Laptop** button on the Control Panel.

To switch to a different display source, press the **Internal Computer** button or press the **VCR/DVD Player** button on the Control Panel.




**NOTE:** Switching sources takes a few seconds and, during that time, all buttons on the Control Panel are disabled.

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